# Yahoo Group Archive:
# SS-40

Yahoo Group summary: SS-40 Receiver

These Yahoo Groups messages were archived in WARC format by ArchiveTeam in 2018. This PDF was generated by Digital Library of Amateur Radio & Communications from the WARC files in 2026.

Date span: 2011-05-29 through 2016-09-06

Source WARC: ss-40.MYnxFHR.warc.gz

Source item: https://archive.org/details/yahoo-groups-2018-09-16T05-00-26Z-83ad63

Messages included in this PDF: 706

Yahoo replaced the domain portions of email addresses with @... in the archived messages. Characters lost in Yahoo's archived text appear as ?.

Messages are presented in ascending Yahoo message-ID order. Gaps indicate records absent from the source WARC or messages omitted from this PDF as spam.

## 2. SS-40 Build

Yahoo group: SS-40
Date: 2011-05-29 18:04:13 UTC
From: arsn8wq
Topic: 2  Message: 2

Howdy Gang,
Four State QRP Group is to be applauded for their new kit. I ordered one on 5/24 and received the kit on 5/27/11. That is what I call fast shipping. I plan on starting my build tonite.

N8WQ
O. Alan Jones

# 3. Re: [SS-40] SS-40 Build

Yahoo group: SS-40
Date: 2011-05-29 18:33:50 UTC
From: Jim Kortge
Topic: 2  Message: 3

On 5/29/2011 2:04 PM, arsn8wq wrote:
> Howdy Gang,
> Four State QRP Group is to be applauded for their new kit. I ordered one on 5/24 and received the kit on 5/27/11. That is what I call fast shipping. I plan on starting my build tonite.
>
> N8WQ
> O. Alan Jones
>
>
>

Greetings Alan,

Glad you have an SS-40 to build. I sure hope you enjoy the build of the receiver and using it after it is done.

72,

Jim, K8IQY

# 4. SS-40 DX Order

Yahoo group: SS-40
Date: 2011-05-29 19:48:31 UTC
From: Stephen
Topic: 4  Message: 4

Hi Jim and everyone else,

Really looking forward to getting my SS-40 over here in England! It will be interesting to see how well it copes with the band in Europe....

Thanks for another great kit...

73s from Steve G0XAR

# 5. SS-40 kit received

Yahoo group: SS-40
Date: 2011-05-29 20:58:01 UTC
From: Jerry
Topic: 5  Message: 5

Hi everybody -- My kit came very quickly too. Ordered 5/25 and received 5/27! My thanks to Terry and to anyone else involved in the kitting. Just doing the parts inventory now -- will take a while.

Jerry AA6KI
Tucson

# 6. Hey, Hey, Hey

Yahoo group: SS-40
Date: 2011-05-29 21:35:35 UTC
From: wb8icn
Topic: 6  Message: 6

Kudo's to Jim for two great kits! A big thanks to Terry for being so prompt in mailing out the kits!!!

Just got my SS-40 in the mail...but grand kids are here so have to wait to start the build. This is going to be a great summer!!!

...Mikey, WB8ICN

# 7. 22-40 construction question

Yahoo group: SS-40
Date: 2011-05-29 22:00:52 UTC
From: Skyridr
Topic: 7  Message: 7

I am not detecting a hiss at the end of step 5, the audio mute and product detector section. Voltage is OK, diodes, transistors, and chips are oriented OK. Anyone else finding this problem?

Wendell N7WM

# 8. RE: [SS-40] SS-40 Build

Yahoo group: SS-40
Date: 2011-05-30 05:11:33 UTC
From: Alan Jones
Topic: 2  Message: 8

Hi Jim,

I just finished the power supply circuit and I am getting ready to test it.

How soon will the transmitter kit be available? Thanks again for a fine kit.

73,

Alan

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Jim Kortge
Sent: Sunday, May 29, 2011 2:34 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] SS-40 Build

On 5/29/2011 2:04 PM, arsn8wq wrote:
> Howdy Gang,
> Four State QRP Group is to be applauded for their new kit. I ordered one on 5/24 and received the kit on 5/27/11. That is what I call fast shipping. I plan on starting my build tonite.
>
> N8WQ
> O. Alan Jones
>
>
>

Greetings Alan,

Glad you have an SS-40 to build. I sure hope you enjoy the build of the receiver and using it after it is done.

72,

Jim, K8IQY

# 9. SS-40 Frequency Coverage

Yahoo group: SS-40
Date: 2011-05-30 11:47:28 UTC
From: Hide
Topic: 9  Message: 9

Hi,

I'm waiting for arrival of SS-40 kit.
I have a question about its bottom frequency.
Because Japanese QRP calling frequency is around 7003kHz.
Can SS-40's VXO down the frequency to the band edge?

Any suggestions welcome.

ja9mat Hidehiko.

# 10. Re: [SS-40] SS-40 Build

Yahoo group: SS-40
Date: 2011-05-30 13:07:03 UTC
From: WA0ITP
Topic: 2  Message: 10

Hi Alan,

No earlier than 2 weeks. probably closer to 3. The boards are the longest lead items.

Sri for the delay.
---
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Alan Jones
To: SS-40@yahoogroups.com
Sent: Monday, May 30, 2011 12:11 AM
Subject: RE: [SS-40] SS-40 Build

Hi Jim,

I just finished the power supply circuit and I am getting ready to test it.

How soon will the transmitter kit be available? Thanks again for a fine kit.

73,

Alan

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Jim Kortge
Sent: Sunday, May 29, 2011 2:34 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] SS-40 Build

On 5/29/2011 2:04 PM, arsn8wq wrote:
> Howdy Gang,
> Four State QRP Group is to be applauded for their new kit. I ordered one on 5/24 and received the kit on 5/27/11. That is what I call fast shipping. I plan on starting my build tonite.
>
> N8WQ
> O. Alan Jones
>
>
>

Greetings Alan,

Glad you have an SS-40 to build. I sure hope you enjoy the build of the receiver and using it after it is done.

72,

Jim, K8IQY

# 11. RE: [SS-40] SS-40 Build

Yahoo group: SS-40
Date: 2011-05-30 14:14:47 UTC
From: Alan Jones
Topic: 2  Message: 11

Hi Terry,

Thanks for the update. I am looking forward to building a complete 40 meter station and the transmitter is all I need. I will be running the SS-40/NS-40/Magic Box combo. Once I get everything running I look forward to adding my own modifications. I hope you are having a good day. My lower back has been hurting the last 2 days, so I am relaxing and having fun building the SS-40 on this Memorial Day.

73,

N8WQ

CH (CPT) U.S. Army Reserve, Retired

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of WA0ITP
Sent: Monday, May 30, 2011 9:07 AM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] SS-40 Build

Hi Alan,

No earlier than 2 weeks. probably closer to 3. The boards are the longest lead items.

Sri for the delay.

---
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----

From: Alan Jones <mailto:oalanjones@...>

To: SS-40@yahoogroups.com

Sent: Monday, May 30, 2011 12:11 AM

Subject: RE: [SS-40] SS-40 Build

Hi Jim,

I just finished the power supply circuit and I am getting ready to test it.

How soon will the transmitter kit be available? Thanks again for a fine kit.

73,

Alan

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Jim Kortge
Sent: Sunday, May 29, 2011 2:34 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] SS-40 Build

On 5/29/2011 2:04 PM, arsn8wq wrote:
> Howdy Gang,
> Four State QRP Group is to be applauded for their new kit. I ordered one on 5/24 and received the kit on 5/27/11. That is what I call fast shipping. I plan on starting my build tonite.
>
> N8WQ
> O. Alan Jones
>
>
>

Greetings Alan,

Glad you have an SS-40 to build. I sure hope you enjoy the build of the receiver and using it after it is done.

72,

Jim, K8IQY

# 12. Re: [SS-40] SS-40 Build

Yahoo group: SS-40
Date: 2011-05-30 14:46:35 UTC
From: WA0ITP
Topic: 2  Message: 12

Fb Alan,

I just orderd the NS-40 boards and parts. The NS-40/MagicBox/SS-40 is an excellent combo. I'm sure you eill enjoy it.

---

I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Alan Jones
To: SS-40@yahoogroups.com
Sent: Monday, May 30, 2011 9:14 AM
Subject: RE: [SS-40] SS-40 Build

Hi Terry,

Thanks for the update. I am looking forward to building a complete 40 meter station and the transmitter is all I need. I will be running the SS-40/NS-40/Magic Box combo. Once I get everything running I look forward to adding my own modifications. I hope you are having a good day. My lower back has been hurting the last 2 days, so I am relaxing and having fun building the SS-40 on this Memorial Day.

73,

N8WQ

CH (CPT) U.S. Army Reserve, Retired

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of WA0ITP
Sent: Monday, May 30, 2011 9:07 AM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] SS-40 Build

Hi Alan,

No earlier than 2 weeks. probably closer to 3. The boards are the longest lead items.

Sri for the delay.

---

I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@wa0itp.com
www.wa0itp.com

www.4sqrp.com
www.qrpspots.com

----- Original Message -----

From: Alan Jones

To: SS-40@yahoogroups.com

Sent: Monday, May 30, 2011 12:11 AM

Subject: RE: [SS-40] SS-40 Build

Hi Jim,

I just finished the power supply circuit and I am getting ready to test it.

How soon will the transmitter kit be available? Thanks again for a fine kit.

73,

Alan

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Jim Kortge
Sent: Sunday, May 29, 2011 2:34 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] SS-40 Build

On 5/29/2011 2:04 PM, arsn8wq wrote:
> Howdy Gang,
> Four State QRP Group is to be applauded for their new kit. I ordered one on 5/24 and received the kit on 5/27/11. That is what I call fast shipping. I plan on starting my build tonite.
>
> N8WQ
> O. Alan Jones
>
>
>

Greetings Alan,

Glad you have an SS-40 to build. I sure hope you enjoy the build of
the receiver and using it after it is done.

72,

Jim, K8IQY

## 13. Re: SS-40 Frequency Coverage

Yahoo group: SS-40
Date: 2011-05-30 15:11:36 UTC
From: bill_nt9k
Topic: 9  Message: 13

I'm curious about this too. I'm thinking that the LO crystal could be changed to shift the frequency, if one could find the right crystal? Maybe use a socket for the LO and be able to restore it to the original range when desired? Mostly, I would like to change the range up to the old 40m novice band, say 7110 to 7125. Might have to buy a 2nd SS-40 to hack on? Maybe Jim or someone else will have some suggestions/advice on this topic?
Thanks, 73. Bill NT9K..
http://www.nt9k.com

--- In SS-40@yahoogroups.com, "Hide" <qrper72@...> wrote:
>
> Hi,
>
> I'm waiting for arrival of SS-40 kit.
> I have a question about its bottom frequency.
> Because Japanese QRP calling frequency is around 7003kHz.
> Can SS-40's VXO down the frequency to the band edge?
>
> Any suggestions welcome.
>
> ja9mat Hidehiko.
>

# 14. Re: 22-40 construction question

Yahoo group: SS-40
Date: 2011-05-30 18:10:31 UTC
From: Skyridr
Topic: 7  Message: 14

That should be ss-40, not 22-40....
Continued construction through step 9. Get
a noise, like a howl that increases amplitude as VR1 is rotated. Howl changes in pitch when TC4 is rotated. White noise probably is masked by the howl when C16 is connected to an antenna.
Have reheated connections and double checked components. Suggestions, anyone?
Will post the solution when the situation is solved.
Wendell

--- In SS-40@yahoogroups.com, "Skyridr" <november7wm@...> wrote:
>
>
> I am not detecting a hiss at the end of step 5, the audio mute and
> product detector section. Voltage is OK, diodes, transistors, and chips
> are oriented OK. Anyone else finding this problem?
>
> Wendell N7WM
>

## 15. Re: SS-40 Frequency Coverage

Yahoo group: SS-40
Date: 2011-05-30 19:32:05 UTC
From: gaskilld
Topic: 9  Message: 15

There is a TBD component R30 which will let you shift the Varactor voltage on the VXO
....see the schematic
I don't known if this would be in the right direction or would pull it enough.
--- In SS-40@yahoogroups.com, "bill_nt9k" <Bill@...> wrote:
>
> I'm curious about this too. I'm thinking that the LO crystal could be changed to shift the frequency, if one could find the right crystal? Maybe use a socket for the LO and be able to restore it to the original range when desired? Mostly, I would like to change the range up to the old 40m novice band, say 7110 to 7125. Might have to buy a 2nd SS-40 to hack on? Maybe Jim or someone else will have some suggestions/advice on this topic?
> Thanks, 73. Bill NT9K..
> http://www.nt9k.com
>
>
> --- In SS-40@yahoogroups.com, "Hide" <qrper72@> wrote:
> >
> > Hi,
> >
> > I'm waiting for arrival of SS-40 kit.
> > I have a question about its bottom frequency.
> > Because Japanese QRP calling frequency is around 7003kHz.
> > Can SS-40's VXO down the frequency to the band edge?
> >
> > Any suggestions welcome.
> >
> > ja9mat Hidehiko.
> >
>

# 16. Re: [SS-40] 22-40 construction question

Yahoo group: SS-40
Date: 2011-05-30 22:04:48 UTC
From: Jim Kortge
Topic: 7  Message: 16

On 5/29/2011 6:00 PM, Skyridr wrote:
>
> I am not detecting a hiss at the end of step 5, the audio mute and
> product detector section. Voltage is OK, diodes, transistors, and chips
> are oriented OK. Anyone else finding this problem?
>
> Wendell N7WM
>
>
>

Wendell,

Was everything OK at the end of Step 3 and you could hear hum from the
audio amplifier?

72,

Jim, K8IQY

# 17. Manual nitpick

Yahoo group: SS-40
Date: 2011-05-30 22:39:56 UTC
From: Paul
Topic: 17  Message: 17

Hi,

I started building mine this afternoon, and downloaded an up to date assembly manual.

I just got done with Step 7 - Crystal Filter. Maybe I'm going cross-eyed and need to take a break, but I'd swear that the assembly manual only calls out 3 of the 4 filter crystals. Not a big deal, all of the caps for the filter were called out, and it was obvious where to place the 4th crystal, hi

One of you might confirm the omission (I've missed more obvoius things before), maybe it can get included in a future revision.

Otherwise things are going great so far. Hum from the audio test, hiss from the product detector test, and silence from the muting test.

Back to work ...

Paul - K0EET

# 18. Inventoried and Iron is Hot

Yahoo group: SS-40
Date: 2011-05-30 22:56:31 UTC
From: wb8icn
Topic: 18  Message: 18

Finished the inventory and now heating up the iron. Took me awhile to figure out if I had all the parts (was missing one cap but had a spare in the junk box). Maybe I should count up each value and post it in the files area so it is easier to inventory the kit.

I use egg cartons to hold the parts (one value to each egg section) and mark the sections...have 48 sections for this project.

...Mikey

# 19. File Uploaded - Part Count for each Item

Yahoo group: SS-40
Date: 2011-05-30 23:15:20 UTC
From: wb8icn
Topic: 19  Message: 19

I uploaded a spreadsheet detailing the number of cap's, resistor's inductors and semiconductors. If I miscounted, let me know so I can update the sheet.

...Mikey

# 20. Re: 22-40 construction question

Yahoo group: SS-40
Date: 2011-05-31 01:31:40 UTC
From: Skyridr
Topic: 7  Message: 20

Jim-

Hum was heard at the end of stem three. At the end of stem 5, the product detector, hiss was not heard, or was covered by a "howl". The howl quieted as expected in the audio mute circuit.
No hiss heard. All electical fixtures were shut off to eliminate ac sources. Board is powered by a battery. Replaced sa612 and lm368, no change.

Am finished with step nine. Had hoped the howl would be fixed somehow. So, back to the detector. Voltages for the sa612 are:
pin 1=0.45, 2=0.51, 3=0, 4=1.83, 5=1.83, 6=1.81, 7=1.22, 8=2.03. these look OK to me.
Suggestions?
tnx
Wendell

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 5/29/2011 6:00 PM, Skyridr wrote:
> >
> > I am not detecting a hiss at the end of step 5, the audio mute and
> > product detector section. Voltage is OK, diodes, transistors, and chips
> > are oriented OK. Anyone else finding this problem?
> >
> > Wendell N7WM
> >
> >
> >
>
>
> Wendell,
>
> Was everything OK at the end of Step 3 and you could hear hum from the
> audio amplifier?
>
> 72,
>
> Jim, K8IQY
>

# 21. Re: [SS-40] 22-40 construction question

Yahoo group: SS-40
Date: 2011-05-31 03:14:02 UTC
From: Martin / K0BXB
Topic: 7  Message: 21

I just finished step 5 about ten minutes ago and I got the hiss and the mute. Sorry about the trouble. Any chance a ground solder connection is not good? I had a MagicBox on the shelf for nearly a year before I thought of that (thanks to a note in another kit manual). The ground plane soaks up a lot of heat and it is easy to NOT get a connection. I have resorted to using a 140 watt soldering gun for those ground plane connections. Takes some care but gets the job done! Just a thought.

Martin K0BXB

From: Jim Kortge
Sent: Monday, May 30, 2011 5:04 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] 22-40 construction question

On 5/29/2011 6:00 PM, Skyridr wrote:
>
> I am not detecting a hiss at the end of step 5, the audio mute and
> product detector section. Voltage is OK, diodes, transistors, and chips
> are oriented OK. Anyone else finding this problem?
>
> Wendell N7WM
>
>
>

Wendell,

Was everything OK at the end of Step 3 and you could hear hum from the audio amplifier?

72,

Jim, K8IQY

## 22. Power Plug?

Yahoo group: SS-40
Date: 2011-05-31 13:51:30 UTC
From: Paul
Topic: 22  Message: 22

Does the power jack take a 5.5/2.1mm or 5.5/2.5mm plug (I think Radio Shack calls these size M and size N respectively)?

Just using wires tack-soldered to the PCB for now, but so far everything is progressing nicely -- Thanks

Paul - K0EET

# 23. Re: [SS-40] Power Plug?

Yahoo group: SS-40
Date: 2011-05-31 13:57:47 UTC
From: WA0ITP
Topic: 22  Message: 23

GM Paul,

The 2.5 mm size. Looks like the N size is correct
http://www.radioshack.com/product/index.jsp?productId=2102488
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Paul" <paul.d.rose@...>
To: <SS-40@yahoogroups.com>
Sent: Tuesday, May 31, 2011 8:51 AM
Subject: [SS-40] Power Plug?

| Does the power jack take a 5.5/2.1mm or 5.5/2.5mm plug (I think
Radio Shack calls these size M and size N respectively)?
|
| Just using wires tack-soldered to the PCB for now, but so far
everything is progressing nicely -- Thanks
|
| Paul - K0EET
|
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 24. Re: [SS-40] Re: 22-40 construction question

Yahoo group: SS-40
Date: 2011-05-31 18:48:46 UTC
From: Jim Kortge
Topic: 7  Message: 24

On 5/30/2011 9:31 PM, Skyridr wrote:
>
> Jim-

Greetings Wendell,

>
> Hum was heard at the end of stem three.

Good.

At the end of stem 5, the product detector, hiss was not heard, or
was covered by a "howl". The howl quieted as expected in the audio
mute circuit.
> No hiss heard. All electical fixtures were shut off to eliminate ac sources. Board is
powered by a battery.

I'm wondering if the battery isn't a stiff enough power source. Can
you try it with a power supply?

Replaced sa612 and lm368, no change.

Ok, also good info.
>
> Am finished with step nine. Had hoped the howl would be fixed somehow. So, back to the
detector. Voltages for the sa612 are:
> pin 1=0.45, 2=0.51, 3=0, 4=1.83, 5=1.83, 6=1.81, 7=1.22, 8=2.03. these look OK to me.
> Suggestions?

Yes, try a different supply and also if you can, take a digital photo
of the rig as it is currently built. Maybe I can spot something by
looking at that.

> tnx
> Wendell

You're welcome.

72,

Jim, K8IQY

# 25. Re: [SS-40] Power Plug?

Yahoo group: SS-40
Date: 2011-05-31 19:12:40 UTC
From: Jim Kortge
Topic: 22  Message: 25

On 5/31/2011 9:51 AM, Paul wrote:
> Does the power jack take a 5.5/2.1mm or 5.5/2.5mm plug (I think Radio Shack calls these size M and size N respectively)?
>
> Just using wires tack-soldered to the PCB for now, but so far everything is progressing nicely -- Thanks
>
> Paul - K0EET
>
>
>
Paul,

The mating plug is 5.5/2.5.

We should probably put that info in the Assembly Manual. I'll do that
on the next update which is underway to remove a couple of typos.

72,

Jim, K8IQY

# 26. Re: [SS-40] SS-40 Build

Yahoo group: SS-40
Date: 2011-05-31 21:21:39 UTC
From: Jim Kortge
Topic: 2  Message: 26

On 5/30/2011 1:11 AM, Alan Jones wrote:
> Hi Jim,
>
> I just finished the power supply circuit and I am getting ready to test it.
>
> How soon will the transmitter kit be available? Thanks again for a fine kit.
>
>
>
> 73,
>
> Alan
>

Alan and others,

The transmitter envisioned for this receiver is the NS-40 that was designed by Dave Cripe, NM0S, and sold by 4 State QRP . It is crystal controlled and easily puts out 5-watts. I think Terry is working hard on doing another run of NS-40 kits so they should be available within the next month.

72,

Jim, K8IQY

# 27. Re: [SS-40] SS-40 Build

Yahoo group: SS-40
Date: 2011-05-31 21:36:57 UTC
From: Dennis Gaskill
Topic: 2  Message: 27

Got the SS-40 receiver Running. Sounds nice; you can sure tell the 500 Hertz filter is in there. It drives my MFJ-281 clear tone speaker purty well.

List of typo's discovered in the written instructions (let me know if I am wrong). Some are nit-noids, but I hope this will cut down on your Head scratching.

Step 7 Crystal Filter Components

Left out the X1 xtal

Step 8 Post Mixer Amp

The resistor called out as R1-100 ohm , should be R4-100 ohm.

Step 10 VXO Components

C50-47pf was left out in this step (shows in the picture).

First "Continuing the VXO build" (testing)

The test point called out as the right pad of C38, should be C48.

Next "Continuing the VXO build"

The C56-0.1uF Cap. and the C49-47pF Cap called out, were not in the parts list.

Maybe the bottom line of the parts list Was missing.

Step 13 Front-End Components

C4 not called out , but was in the picture.

Dennis KC0IFQ

# 28. Re: [SS-40] SS-40 Frequency Coverage

Yahoo group: SS-40
Date: 2011-05-31 21:58:41 UTC
From: Jim Kortge
Topic: 9  Message: 28

On 5/30/2011 7:47 AM, Hide, ja9mat wrote:
> Hi,

Hello Hide,

Nice to see you on this list.

>
> I'm waiting for arrival of SS-40 kit.
> I have a question about its bottom frequency.
> Because Japanese QRP calling frequency is around 7003kHz.
> Can SS-40's VXO down the frequency to the band edge?

No it can't with the crystals that are presently used in the VXO. I selected a VXO frequency of 16.258 MHz, which is a standard ECS brand computer crystal frequency available from DigiKey. To get down near the edge of the band at 7.003 MHz, the VXO crystals would have to be at nominally 16.230 MHz. That frequency isn't available from Mouser or DigiKey here in the USA, but might be available in Japan or other parts of Asia. The VXO could be left where it is and the IF frequency of 9.213 MHz moved down by approximately 25 KHz to 9.188 MHz, or somewhere close to that. An alternative would be to replace the VXO with a DDS sub-system using one of the parts that are being offered. That approach probably won't have the low phase noise of the VXO though.
>
> Any suggestions welcome.

See above.

Other have inquired about moving the coverage up to the old USA novice band including 7.122 MHz. It's the same issue, the required crystals are not readily available here in the USA.

72,

Jim, K8IQY

# 29. SS-40 Revised Assembly Manual

Yahoo group: SS-40
Date: 2011-05-31 22:08:19 UTC
From: Jim Kortge
Topic: 29  Message: 29

Guys and Gals,

A revised SS-40 Assembly Manual is on the wa0itp web site. It contains minor changes along with adding in missing items like the call out of X1 during assembly. The version is V1.0B4, so if you don't have that one, you don't have the latest. I'll keep making changes until it is all correct.

Thanks for the help in finding these problem areas. My technical editor (that would be me) isn't very good! :-(

72,

Jim, K8IQY

# 31. Re: SS-40 Frequency Coverage

Yahoo group: SS-40
Date: 2011-05-31 22:34:50 UTC
From: Hide
Topic: 9  Message: 31

OK Jim,

I agree with using DDS as you mentioned is the best solution.
Anyway I will consider about this subject after building.
I will report again.

ja9mat Hidehiko.

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 5/30/2011 7:47 AM, Hide, ja9mat wrote:
> > Hi,
>
> Hello Hide,
>
> Nice to see you on this list.
>
> >
> > I'm waiting for arrival of SS-40 kit.
> > I have a question about its bottom frequency.
> > Because Japanese QRP calling frequency is around 7003kHz.
> > Can SS-40's VXO down the frequency to the band edge?
>
> No it can't with the crystals that are presently used in the VXO. I
> selected a VXO frequency of 16.258 MHz, which is a standard ECS brand
> computer crystal frequency available from DigiKey. To get down near
> the edge of the band at 7.003 MHz, the VXO crystals would have to be
> at nominally 16.230 MHz. That frequency isn't available from Mouser
> or DigiKey here in the USA, but might be available in Japan or other
> parts of Asia. The VXO could be left where it is and the IF frequency
> of 9.213 MHz moved down by approximately 25 KHz to 9.188 MHz, or
> somewhere close to that. An alternative would be to replace the VXO
> with a DDS sub-system using one of the parts that are being offered.
> That approach probably won't have the low phase noise of the VXO though.
> >
> > Any suggestions welcome.
>
> See above.
>
> Other have inquired about moving the coverage up to the old USA novice
> band including 7.122 MHz. It's the same issue, the required crystals
> are not readily available here in the USA.
>
> 72,
>
> Jim, K8IQY

>

# 32. Re: [SS-40] SS-40 Build

Yahoo group: SS-40
Date: 2011-05-31 23:32:39 UTC
From: Jim Kortge
Topic: 2  Message: 32

On 5/31/2011 5:36 PM, Dennis Gaskill wrote:
>
>
> Got the SS-40 receiver Running.

Great!

Sounds nice; you can sure tell the 500 Hertz filter is in there.
It drives my MFJ-281 clear tone speaker purty well.

That's the speaker that I use with mine.

>
>
>
> List of typo's discovered in the written instructions (let me know if I am wrong). Some
are nit-noids, but I hope this will cut down on your Head scratching.
>
>
>
> Step 7 Crystal Filter Components
>
> Left out the X1 xtal

Yes, that was fixed on the last Assembly Manual release V1.0B4
>
>
>
> Step 8 Post Mixer Amp
>
> The resistor called out as R1-100 ohm , should be R4-100 ohm.

Step 8 is the IF Amplifier and R4 is called out correctly there.
>
>
>
> Step 10 VXO Components
>
> C50-47pf was left out in this step (shows in the picture).

I'm showing in text after X8 is installed and before C52 is indicated
as not being installed.
>
>
>
> First "Continuing the VXO build" (testing)
>

> The test point called out as the right pad of C38, should be C48.

That should read the left pad of C48. On the right pad there is no
signal yet.
>
>
>
> Next "Continuing the VXO build"
>
> The C56-0.1uF Cap. and the C49-47pF Cap called out, were not in the parts list.
>
> Maybe the bottom line of the parts list Was missing.

I'll check that out. Should be in the Bill of Material and was but
got cut off due to formatting issues. Fixed now.
>
>
>
> Step 13 Front-End Components
>
> C4 not called out , but was in the picture.

Yup, got missed in the sequence.
>
>
>
>
>
> Dennis KC0IFQ

Dennis, thanks for finding these. All are now in Version 1.0B5

72,

Jim, K8IQY

# 33. Re: [SS-40] Manual nitpick

Yahoo group: SS-40
Date: 2011-05-31 23:34:09 UTC
From: Jim Kortge
Topic: 17  Message: 33

On 5/30/2011 6:39 PM, Paul wrote:
> Hi,
>
> I started building mine this afternoon, and downloaded an up to date assembly manual.
>
> I just got done with Step 7 - Crystal Filter. Maybe I'm going cross-eyed and need to take a break, but I'd swear that the assembly manual only calls out 3 of the 4 filter crystals. Not a big deal, all of the caps for the filter were called out, and it was obvious where to place the 4th crystal, hi
>
> One of you might confirm the omission (I've missed more obvoius things before), maybe it can get included in a future revision.
>
> Otherwise things are going great so far. Hum from the audio test, hiss from the product detector test, and silence from the muting test.
>
> Back to work ...
>
>
> Paul - K0EET
>
>
>

Got the missing X1 into the manual.

72 and thanks Paul; build on.....,

Jim, K8IQY

# 34. RE: [SS-40] Manual nitpick

Yahoo group: SS-40
Date: 2011-06-01 00:42:20 UTC
From: Alan Jones
Topic: 17  Message: 34

The only typo I have found so far is for the 2.2K metal film resistor color code.

The manual says that the 2.2k metal film color code is:

Red Red Black Black Brown

It should be:

Red Red Black Brown Brown

Please correct me if I am wrong.

Alan,

N8WQ

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Jim Kortge
Sent: Tuesday, May 31, 2011 7:34 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] Manual nitpick

On 5/30/2011 6:39 PM, Paul wrote:
> Hi,
>
> I started building mine this afternoon, and downloaded an up to date assembly manual.
>
> I just got done with Step 7 - Crystal Filter. Maybe I'm going cross-eyed and need to take a break, but I'd swear that the assembly manual only calls out 3 of the 4 filter crystals. Not a big deal, all of the caps for the filter were called out, and it was obvious where to place the 4th crystal, hi
>
> One of you might confirm the omission (I've missed more obvoius things before), maybe it can get included in a future revision.
>
> Otherwise things are going great so far. Hum from the audio test, hiss from the product detector test, and silence from the muting test.
>
> Back to work ...
>
>
> Paul - K0EET
>
>

>

Got the missing X1 into the manual.

72 and thanks Paul; build on.....,

Jim, K8IQY

# 35. VXO voltage

Yahoo group: SS-40
Date: 2011-06-01 02:58:04 UTC
From: Paul
Topic: 35  Message: 35

After the 3rd VXO stage (no mixer), I'm getting 2.3 to 3.5v p-p, instead of the 5-7v p-p called for. Waveform looks nice.

I got the expected 2.5v p-p after the 1st stage.

I didn't measure things after the 2nd stage.

Is this worth digging into, or is it close enough?

Measured at mixer pad 6 with 10x scope probe on an old TEK 475a, ground clip on the top left screw hole

Paul - K0EET

# 36. VR2 question

Yahoo group: SS-40
Date: 2011-06-01 09:44:25 UTC
From: bill_nt9k
Topic: 36  Message: 36

Will it make much or any difference if VR2 is 5k, instead of the 10k that was shipped in the newest kits? Would it be worth it for me to buy a 10k tuning pot? Seems to me, that the extra 5k would allow for a bit more tuning range? I'll skip that step for now.
Thanks, 72. Bill NT9K..
http://www.nt9k.com
http://www.nt9k.com/qrp

# 37. Re: VR2 question

Yahoo group: SS-40
Date: 2011-06-01 12:05:24 UTC
From: Paul
Topic: 36  Message: 37

Looks like it forms a voltage divider to reverse bias the tuning diode. The ratio of the upper section of VR2 to the lower section is what matters. I'd be surprised if you could tell the difference. The 5k will draw a bit more current (.4 vs .8 ma)

Paul - K0EET

--- In SS-40@yahoogroups.com, "bill_nt9k" <Bill@...> wrote:
>
> Will it make much or any difference if VR2 is 5k, instead of the 10k that was shipped in the newest kits? Would it be worth it for me to buy a 10k tuning pot? Seems to me, that the extra 5k would allow for a bit more tuning range? I'll skip that step for now.
> Thanks, 72. Bill NT9K..
> http://www.nt9k.com
> http://www.nt9k.com/qrp
>

# 38. Re: VR2 question

Yahoo group: SS-40
Date: 2011-06-01 12:28:07 UTC
From: Paul
Topic: 36  Message: 38

err, make that .8 vs 1.6 ma. Coffee helps everything.

--- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@...> wrote:
>
> Looks like it forms a voltage divider to reverse bias the tuning diode. The ratio of the upper section of VR2 to the lower section is what matters. I'd be surprised if you could tell the difference. The 5k will draw a bit more current (.4 vs .8 ma)
>
> Paul - K0EET
>
> --- In SS-40@yahoogroups.com, "bill_nt9k" <Bill@> wrote:
> >
> > Will it make much or any difference if VR2 is 5k, instead of the 10k that was shipped in the newest kits? Would it be worth it for me to buy a 10k tuning pot? Seems to me, that the extra 5k would allow for a bit more tuning range? I'll skip that step for now.
> > Thanks, 72. Bill NT9K..
> > http://www.nt9k.com
> > http://www.nt9k.com/qrp
> >
>

# 39. Re: [SS-40] Manual nitpick

Yahoo group: SS-40
Date: 2011-06-01 13:24:46 UTC
From: Jim Kortge
Topic: 17  Message: 39

On 5/31/2011 8:42 PM, Alan Jones wrote:
> The only typo I have found so far is for the 2.2K metal film resistor color
> code.
>
> The manual says that the 2.2k metal film color code is:
>
> Red Red Black Black Brown
>
>
>
> It should be:
>
> Red Red Black Brown Brown
>
>
>
> Please correct me if I am wrong.
>
>
>
> Alan,
>
> N8WQ

Alan,

You are correct and the manual has been updated to show Red Red Black
Brown Brown.

72 and thanks,

Jim, K8IQY

# 40. Re: [SS-40] VR2 question

Yahoo group: SS-40
Date: 2011-06-01 13:54:52 UTC
From: Jim Kortge
Topic: 36  Message: 40

On 6/1/2011 5:44 AM, bill_nt9k wrote:
> Will it make much or any difference if VR2 is 5k, instead of the 10k that was shipped in the newest kits?

It doesn't matter at all whether VR2 is 5K or 10K. It is a variable
voltage source and covers the same voltage range with either value.
With the 5K, there is a bit more current draw, but not significantly more.

Would it be worth it for me to buy a 10k tuning pot? Seems to me, that
the extra 5k would allow for a bit more tuning range?

No, not at all.

I'll skip that step for now.

No need.

> Thanks, 72. Bill NT9K..

You are welcome Bill.

72,

Jim, K8IQY
>

# 41. Re: VR2 question

Yahoo group: SS-40
Date: 2011-06-01 15:05:41 UTC
From: bill_nt9k
Topic: 36  Message: 41

Thanks guys! I'd like to say that I think the level of support for this and the other 4SQRP kits is simply outstanding! That means a lot to me and other builders too, I'm sure. Since I will be using this receiver with a bench power supply, the extra current draw won't be an issue. Back to the soldering iron now.
72, Bill NT9K
http://www.nt9k.com

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 6/1/2011 5:44 AM, bill_nt9k wrote:
> > Will it make much or any difference if VR2 is 5k, instead of the 10k that was shipped in the newest kits?
>
> It doesn't matter at all whether VR2 is 5K or 10K. It is a variable
> voltage source and covers the same voltage range with either value.
> With the 5K, there is a bit more current draw, but not significantly more.
>
> Would it be worth it for me to buy a 10k tuning pot? Seems to me, that
> the extra 5k would allow for a bit more tuning range?
>
> No, not at all.
>
> I'll skip that step for now.
>
> No need.
>
> > Thanks, 72. Bill NT9K..
>
> You are welcome Bill.
>
> 72,
>
> Jim, K8IQY
> >
>

# 42. Re: Yet another SS-40 Assembly Manual Update

Yahoo group: SS-40
Date: 2011-06-01 18:03:54 UTC
From: Jim Kortge
Topic: 42  Message: 42

On 6/1/2011 12:59 PM, WA0ITP wrote:
> Done

Thank you again Terry.

72,

Jim, K8IQY

# 43. VXO Output Low

Yahoo group: SS-40
Date: 2011-06-01 19:25:28 UTC
From: huyettm
Topic: 43  Message: 43

I have paused just prior to going on to step 11, installing the mixer. The output voltage on pin 6 mixer pad (mixer not installed) varies from 2.6 to 3.6 volts p-p as I rotate TR2 from min to max. Using my old heathkit VTVM with RF probe I measure about 0.8v to 1.06v on mixer pad 6.

I noticed earlier (and confirm it now) that the output from the oscillator (.75 volts with rf probe) was also lower than specified (and stayed that way on the emiter of the buffer, Q7 as well). The waveform is distorted from the oscillator though it looks clean on mixer pin 6. I'm not sure whether to be concerned or not at this stage. The measrued frequency range on the VXO is 16.228 to 16.256mhz.

Just wondered whether these are similar to what others are seeing at this stage?

It's been fun so far and each stage has work (with the above concerns).

Martin K0BXB

# 44. Re: VXO Output Low

Yahoo group: SS-40
Date: 2011-06-01 19:42:30 UTC
From: Paul
Topic: 43  Message: 44

I'm also paused waiting to install the mixer for the same reason. I have a post from last night (message 35, as yet unanswered).

I can get no more than 3.5 volts on mixer pad 6. I was able to get the expected voltage after building the first stage with full rotation of TR2.

Also like you, the waveform was a little ugly after the stage 1 build, but looks clean after stage 3 (sampled across R29 with a 10x oscilloscope probe).

--- In SS-40@yahoogroups.com, "huyettm" <mehhuyett@...> wrote:
>
> I have paused just prior to going on to step 11, installing the mixer. The output voltage on pin 6 mixer pad (mixer not installed) varies from 2.6 to 3.6 volts p-p as I rotate TR2 from min to max. Using my old heathkit VTVM with RF probe I measure about 0.8v to 1.06v on mixer pad 6.
>
> I noticed earlier (and confirm it now) that the output from the oscillator (.75 volts with rf probe) was also lower than specified (and stayed that way on the emiter of the buffer, Q7 as well). The waveform is distorted from the oscillator though it looks clean on mixer pin 6. I'm not sure whether to be concerned or not at this stage. The measrued frequency range on the VXO is 16.228 to 16.256mhz.
>
> Just wondered whether these are similar to what others are seeing at this stage?
>
> It's been fun so far and each stage has work (with the above concerns).
>
> Martin K0BXB
>

# 45. Re: [SS-40] VXO Output Low

Yahoo group: SS-40
Date: 2011-06-01 20:03:10 UTC
From: Jim Kortge
Topic: 43  Message: 45

On 6/1/2011 3:25 PM, huyettm wrote:
> I have paused just prior to going on to step 11, installing the mixer. The output voltage on pin 6 mixer pad (mixer not installed) varies from 2.6 to 3.6 volts p-p as I rotate TR2 from min to max.

3.6 volts p-p is 32 milliwatts or 15 dBm into the 50 Ohm load (R29),
so you have plenty of mixer drive. It requires +7 dBm.

Using my old heathkit VTVM with RF probe I measure about 0.8v to
1.06v on mixer pad 6.

I'd say you are good to go, but I'll reiterate a point here that is in
the Assembly Manual, once the mixer is soldered in, one can't make the
above measurement of mixer drive. So I'm glad you stopped and did that.

>
> I noticed earlier (and confirm it now) that the output from the oscillator (.75 volts with rf probe) was also lower than specified (and stayed that way on the emiter of the buffer, Q7 as well). The waveform is distorted from the oscillator though it looks clean on mixer pin 6.

That is really all that we care about. C49 and L8 form a low pass
filter which helps clean up the drive to the mixer. See the Spectrum
Analyzer plot in the manual if you're interested in that.

I'm not sure whether to be concerned or not at this stage.

You are good to go Martin. Solder in the ADE-1 mixer.

The measrued frequency range on the VXO is 16.228 to 16.256mhz.

28 KHz, exactly what my kit ended up for a tuning range. That is
going to translate to about 7.043 down to 7.015 MHz. Nearly perfect!

>
> Just wondered whether these are similar to what others are seeing at this stage?

I would be interested in that data also.
>
> It's been fun so far

Good.....

and each stage has work (with the above concerns).

Also good....
>
> Martin K0BXB

Thanks for the feedback Martin.

72,

Jim, K8IQY

# 46. Re: [SS-40] VXO voltage

Yahoo group: SS-40
Date: 2011-06-01 20:12:26 UTC
From: Jim Kortge
Topic: 35  Message: 46

On 5/31/2011 10:58 PM, Paul wrote:
> After the 3rd VXO stage (no mixer), I'm getting 2.3 to 3.5v p-p, instead of the 5-7v p-p called for.

3.5 volts p-p is enough Paul. That level will easily drive the mixer properly. I'm wondering now where I measured the 5-7 volts p-p, so others are not seeing that level. I'll have to backtrack if I can to identify what I did.

Waveform looks nice.

It should! :-)

>
> I got the expected 2.5v p-p after the 1st stage.
>
> I didn't measure things after the 2nd stage.
>
> Is this worth digging into, or is it close enough?

Solder in the mixer!
>
> Measured at mixer pad 6 with 10x scope probe on an old TEK 475a,

Wish I had a 475A in good working order. Great scope. A 485 would be even better....

ground clip on the top left screw hole

Good location.

Sorry for the delay in answering. I'm working three lists and getting the BoMs in order for more SS-40 and MagicBox kits. Keeping me hopping.

>
>
>
> Paul - K0EET
>

72,

Jim, K8IQY

# 47. VXO voltage - It Works!

Yahoo group: SS-40
Date: 2011-06-01 20:27:35 UTC
From: huyettm
Topic: 35  Message: 47

Thanks for the encouragement, Jim. I soldered on the mixer, which was very easy, by the way, and bingo, I copied part of a qso between WA1LWS and AA8AM. Pretty cool. Now on to the front end!

73, Martin K0BXB

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 5/31/2011 10:58 PM, Paul wrote:
> > After the 3rd VXO stage (no mixer), I'm getting 2.3 to 3.5v p-p, instead of the 5-7v p-p called for.
>
> 3.5 volts p-p is enough Paul. That level will easily drive the mixer
> properly. I'm wondering now where I measured the 5-7 volts p-p, so
> others are not seeing that level. I'll have to backtrack if I can to
> identify what I did.
>
> Waveform looks nice.
>
> It should! :-)
>
> >
> > I got the expected 2.5v p-p after the 1st stage.
> >
> > I didn't measure things after the 2nd stage.
> >
> > Is this worth digging into, or is it close enough?
>
> Solder in the mixer!
> >
> > Measured at mixer pad 6 with 10x scope probe on an old TEK 475a,
>
> Wish I had a 475A in good working order. Great scope. A 485 would be
> even better....
>
> ground clip on the top left screw hole
>
> Good location.
>
> Sorry for the delay in answering. I'm working three lists and getting
> the BoMs in order for more SS-40 and MagicBox kits. Keeping me hopping.
>
> >
> >
> >

> > Paul - K0EET
> >
>
>
> 72,
>
> Jim, K8IQY
>

# 48. Re: [SS-40] VXO voltage - It Works!

Yahoo group: SS-40
Date: 2011-06-01 20:36:59 UTC
From: Jim Kortge
Topic: 35  Message: 48

On 6/1/2011 4:27 PM, huyettm wrote:
> Thanks for the encouragement, Jim. I soldered on the mixer, which was very easy, by the way, and bingo, I copied part of a qso between WA1LWS and AA8AM. Pretty cool. Now on to the front end!
>
> 73, Martin K0BXB

Martin,

Thanks for the update and great to hear that your SS-40 is hearing 40-meter signals. When the front-end components are installed, it will hear even better. Nice to know that the mixer soldering went well. That part worried me a lot.

72,

Jim, K8IQY

# 49. Soldering the mixer

Yahoo group: SS-40
Date: 2011-06-01 20:44:06 UTC
From: huyettm
Topic: 35  Message: 49

I used a wooden clothspin to hold the mixer in place. Inspection showed that all pins were in contact with their pads. So I used my Radio Shack Digital soldering station, set at 755 degrees and .035 dia 60/40 Radio Shack solder and just carefully soldered each pad. All but one flowed immediately. One took a bit more effort, but only just a bit!

Martin K0BXB

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 6/1/2011 4:27 PM, huyettm wrote:
> > Thanks for the encouragement, Jim. I soldered on the mixer, which was very easy, by the way, and bingo, I copied part of a qso between WA1LWS and AA8AM. Pretty cool. Now on to the front end!
> >
> > 73, Martin K0BXB
>
> Martin,
>
> Thanks for the update and great to hear that your SS-40 is hearing
> 40-meter signals. When the front-end components are installed, it
> will hear even better. Nice to know that the mixer soldering went
> well. That part worried me a lot.
>
> 72,
>
> Jim, K8IQY
>

# 50. Re: VXO voltage

Yahoo group: SS-40
Date: 2011-06-01 20:44:28 UTC
From: Paul
Topic: 35  Message: 50

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> Wish I had a 475A in good working order. Great scope. A 485 would be
> even better....

Picked it up on e-bay about 2 yeaars ago. Everything on both channels works, at least well enough for what I'm doing.

> Sorry for the delay in answering.

No problem. It was bedtime anyway, and wouldn't get to work on it anyway until after supper tonight, so no time lost. Maybe I'll get it done tonight.

I had fun scratching my head about it anyhow. I looked up a volts to dBm conversion chart for 50 ohm and had just about talked myself into forging ahead anyway.

I figured out (I think) that C45 and L8 form an "low-pass" L network to translate the 820 ohm collector load down to 50 ohms. Translating the impedance and cleaning up the VXO harmonics at the same time. That's more than I would have learned if I hadn't had this "problem".

Thanks for taking the time to answer questions.

Paul - K0EET

# 51. Re: [SS-40] Re: VXO voltage

Yahoo group: SS-40
Date: 2011-06-01 21:34:59 UTC
From: Jim Kortge
Topic: 35  Message: 51

On 6/1/2011 4:44 PM, Paul wrote:
>
>
> --- In SS-40@yahoogroups.com, Jim Kortge<jim.k8iqy@...> wrote:

-snip-

>
> I had fun scratching my head about it anyhow. I looked up a volts to dBm conversion chart for 50 ohm and had just about talked myself into forging ahead anyway.

I use my chart all the time.

>
> I figured out (I think) that C45 and L8 form an "low-pass" L network to translate the 820 ohm collector load down to 50 ohms.

You have it exactly.

Translating the impedance and cleaning up the VXO harmonics at the
same time.

Yes indeed.

That's more than I would have learned if I hadn't had this "problem".

It is sometime good to stop and ponder what is going on. I do that a
lot anymore. Must be age related! :-)
>
>
> Thanks for taking the time to answer questions.

Happy to do so.

72,

Jim, K8IQY

# 52. Re: VXO voltage

Yahoo group: SS-40
Date: 2011-06-01 22:32:31 UTC
From: Paul
Topic: 35  Message: 52

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
> Solder in the mixer!

Mixer in, signals copied, on to the front end.

# 53. Re: [SS-40] Re: VXO voltage

Yahoo group: SS-40
Date: 2011-06-01 23:15:31 UTC
From: Jim Kortge
Topic: 35  Message: 53

On 6/1/2011 6:32 PM, Paul wrote:
>
>
> --- In SS-40@yahoogroups.com, Jim Kortge<jim.k8iqy@...> wrote:
>> Solder in the mixer!
>
> Mixer in, signals copied, on to the front end.
>
>
Paul,

Great to hear. Another SS-40 almost finished.

72,

Jim, K8IQY

# 54. Silk Screen Overlay Added to SS-40 Files Section

Yahoo group: SS-40
Date: 2011-06-01 23:24:02 UTC
From: Jim Kortge
Topic: 54  Message: 54

Gang,

I've uploaded a PDF version of the Silk Screen Parts Overlay to the files section. It can be scaled and printed at any size that you might like. Maybe it will help while you are building to located particular parts.

72,

Jim, K8IQY

PS, the system was supposed to deliver a notice of the above, but has not done so, so my apologies if you get two notices.

# 55. Re: SS-40 Revised Assembly Manual

Yahoo group: SS-40
Date: 2011-06-02 00:25:10 UTC
From: Jerry
Topic: 29  Message: 55

Jim,

I just obtained the latest manual (v.1.0H) -- thanks. Editing isn't the most fun in the world, I know, but would it possible to provide a separate errata/change sheet? I've already printed out an earlier version and would prefer to pencil in the changes (or print selected pages) rather than reprint the whole thing.

Thanks for keeping us all informed. I'm really looking forward to getting on with the build!

73.

Jerry AA6KI

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> Guys and Gals,
>
> A revised SS-40 Assembly Manual is on the wa0itp web site. It
> contains minor changes along with adding in missing items like the
> call out of X1 during assembly. The version is V1.0B4, so if you
> don't have that one, you don't have the latest. I'll keep making
> changes until it is all correct.
>
> Thanks for the help in finding these problem areas. My technical
> editor (that would be me) isn't very good! :-(
>
> 72,
>
> Jim, K8IQY
>

# 56. Finished and working

Yahoo group: SS-40
Date: 2011-06-02 00:43:55 UTC
From: huyettm
Topic: 56  Message: 56

I finished my SS-40 a little bit ago. Using my signal generator and audio volt meter I aligned it. I don't have an insulted or plastic alignment tool so adjusting the antenna trimmer is a bit tricky. Not sure I have that maximized. The other two peaked very nicely. The AGC pot TR1 didn't seem to do anything. The voltage on the collector of Q6 seemed unimpressed that I was twiddling with the pot so not sure what is up there. Will do some checking.

On air check is impressive. Signals are very clear. The 500 hz filter makes tuning very critical. A ten turn tuning pot might be nice! :-)

Frequency range is 7.015 to 7.042.

Can't wait to put it on the air.

Thanks Jim for a fun and effective project!

73 Martin K0BXB

# 57. Re: [SS-40] Finished and working

Yahoo group: SS-40
Date: 2011-06-02 01:39:04 UTC
From: Jim Kortge
Topic: 56  Message: 57

On 6/1/2011 8:43 PM, huyettm wrote:
> I finished my SS-40 a little bit ago.

Congratulations Martin.

Using my signal generator and audio volt meter I aligned it. I don't have an insulted or plastic alignment tool so adjusting the antenna trimmer is a bit tricky. Not sure I have that maximized.

It might be off a tad, but I'll bet it is close. The cold end of that trimmer is 50 Ohms, so hand capacitance and the inductance from the tuning wand are minimal. Also, TC4 has a very broad peak.

The other two peaked very nicely.

Good, that's the way they should tune.

The AGC pot TR1 didn't seem to do anything. The voltage on the collector of Q6 seemed unimpressed that I was twiddling with the pot so not sure what is up there.

Were you doing that setting of TR1 with an antenna connected or the signal generator? Without a signal into the input, no AGC voltage is generated, so the collector of Q6 will be sitting at about 1.4 volts and the collector of Q3 will be at about 0.05 volts, completely saturated. Those same conditions are achieved with TR1 fully counter clockwise. With no AGC voltage, Q1 will be running at a gain of about 6 dB and it is a good way to tune the various trimmers, but it doesn't take much signal in that configuration to overload the audio amp. It will start to distort the audio at a few micro volts. In the receivers that I've built, the AGC setting pot, trimmer TR1 was just below the 1/2 way point for best AGC action and crisp audio. The voltage on Q3 will be 1-3 volts or higher, depending on the strength of the incoming signal. Q1 is then running as a variable attenuator, and can supply up to 60 dB of attenuation if necessary to level the signal reaching the ADE-1 mixer. By the way, you did use the 10K trimmer for TR1. If the 1K is used there, it won't work correctly.

Will do some checking.
>
> On air check is impressive. Signals are very clear.

AGC must be working then....

The 500 hz filter makes tuning very critical.

A bit, but keeps the adjacent signal at bay.

A ten turn tuning pot might be nice! :-)

Yes, but that would increase the cost of the kit by $10 at least. The single turn pot and 25-30 KHz tuning range were part of the compromise to keep the costs in check.
>
> Frequency range is 7.015 to 7.042.

Very nice.....
>
> Can't wait to put it on the air.

I can't wait to have that happen too.
>
> Thanks Jim for a fun and effective project!

You are welcome Martin. Glad it is working FB for you.

> 73 Martin K0BXB

72,

Jim, K8IQY
>
>

# 58. Re: [SS-40] Re: SS-40 Revised Assembly Manual

Yahoo group: SS-40
Date: 2011-06-02 01:51:16 UTC
From: Jim Kortge
Topic: 29  Message: 58

On 6/1/2011 8:25 PM, Jerry wrote:
> Jim,

Hi Jerry,

>
> I just obtained the latest manual (v.1.0H) -- thanks.

Terry has been doing a fantastic job keeping up with me sending him
newer versions.

Editing isn't the most fun in the world, I know, but would it
possible to provide a separate errata/change sheet?

Sorry, I don't have that nor the ability to create it accurately. As
the changes came in via the group, I created a revised version with
those items that were pointed out to be incorrect or missing.. We've
gone from V1.0B2 to V1.0B5, which is the version now posted on Terry's
SS-40 web site, all in about 48 hours. My suggestion is to use your
older version as you go along and when you hit something that should
be there but isn't, print out a replacement page. The change should
be there unless you discover something else. Or open up the old
version and the latest with a PDF reader and compare pages.

I've already printed out an earlier version and would prefer to
pencil in the changes (or print selected pages) rather than reprint
the whole thing.

Yes, I understand but can't help as I didn't keep a log of the changes
that I made.
>
> Thanks for keeping us all informed.

Doing my best.....

I'm really looking forward to getting on with the build!

Good luck!
>
> 73.
>
> Jerry AA6KI

72,

Jim, K8IQY

# 59. So Close!

Yahoo group: SS-40
Date: 2011-06-02 03:09:59 UTC
From: Paul
Topic: 59  Message: 59

Almost finished tonight, but am mising C15 (120pF). Guess I should have inventoried :)

The closest match in my junk box is 150pF

The parallel combination of C15 (at 150pf) and midrange TC3 would be 190pF (instead of 160pf)

If I wound L4 with 26 turns instead of 29, I should get 2.7uH instead of 3.3uH (according to one of Diz's charts).

I think this should put me back near 7.0MHz at midrange of TC3 for the last tuned circuit before the mixer.

Is this a reasonable compromise, or should I look harder for a 120pf?

I absolutely don't want to have you guys mail out a single cap.

Paul - K0EET

# 60. Re: [SS-40] So Close!

Yahoo group: SS-40
Date: 2011-06-02 03:29:42 UTC
From: WA0ITP
Topic: 59  Message: 60

My apologies for the missing 120p. Sounds like too much work Paul.
Let me check an see if I have one here, or a couple that you can
parallel for the 120p

Vri for the shortage.
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Paul" <paul.d.rose@...>
To: <SS-40@yahoogroups.com>
Sent: Wednesday, June 01, 2011 10:09 PM
Subject: [SS-40] So Close!

| Almost finished tonight, but am mising C15 (120pF). Guess I should
have inventoried :)
|
| The closest match in my junk box is 150pF
|
| The parallel combination of C15 (at 150pf) and midrange TC3 would be
190pF (instead of 160pf)
|
| If I wound L4 with 26 turns instead of 29, I should get 2.7uH
instead of 3.3uH (according to one of Diz's charts).
|
| I think this should put me back near 7.0MHz at midrange of TC3 for
the last tuned circuit before the mixer.
|
| Is this a reasonable compromise, or should I look harder for a
120pf?
|
| I absolutely don't want to have you guys mail out a single cap.
|
|
|
| Paul - K0EET
|
|
|
| ---
|

| Yahoo! Groups Links
|
|
|

# 61. Re: So Close!

Yahoo group: SS-40
Date: 2011-06-02 04:51:32 UTC
From: Paul
Topic: 59  Message: 61

I haven't wound L4 yet, so it wouldn't be a big deal if I had an informed opinion that it might work.

In any case, don't mail out anything yet. I have a couple kits put back for rainy weekends. If one has a 120pF, I'll swipe it and leave an IOU to preserve my future sanity :)

--- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@...> wrote:
>
> My apologies for the missing 120p. Sounds like too much work Paul.
> Let me check an see if I have one here, or a couple that you can
> parallel for the 120p
>
> Vri for the shortage.
> ---
> I love this radio stuff !
> 72, 73 Terry, WAØITP
> wa0itp@...
> www.wa0itp.com
> www.4sqrp.com
> www.qrpspots.com
>
>
>
> ----- Original Message -----
> From: "Paul" <paul.d.rose@...>
> To: <SS-40@yahoogroups.com>
> Sent: Wednesday, June 01, 2011 10:09 PM
> Subject: [SS-40] So Close!
>
>
> | Almost finished tonight, but am mising C15 (120pF). Guess I should
> have inventoried :)
> |
> | The closest match in my junk box is 150pF
> |
> | The parallel combination of C15 (at 150pf) and midrange TC3 would be
> 190pF (instead of 160pf)
> |
> | If I wound L4 with 26 turns instead of 29, I should get 2.7uH
> instead of 3.3uH (according to one of Diz's charts).
> |
> | I think this should put me back near 7.0MHz at midrange of TC3 for
> the last tuned circuit before the mixer.
> |
> | Is this a reasonable compromise, or should I look harder for a

```
> 120pf?
> |
> | I absolutely don't want to have you guys mail out a single cap.
> |
> |
> |
> | Paul - K0EET
> |
> |
> |
> | ------------------------------------
> |
> | Yahoo! Groups Links
> |
> |
> |
>
```

# 62. Re: So Close!

Yahoo group: SS-40
Date: 2011-06-02 05:18:50 UTC
From: Paul
Topic: 59  Message: 62

Found an old drawer with some unmarked disk ceramics (from one of those old $5 "500 piece grab bags" at Dan's Small Parts) . One measures 122pF on my AADE LC meter. Looks like I'm in business. Sometimes pays to be a pack-rat. Thanks for the help.

Paul - K0EET

--- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@...> wrote:
>
> My apologies for the missing 120p. Sounds like too much work Paul.
> Let me check an see if I have one here, or a couple that you can
> parallel for the 120p
>
> Vri for the shortage.
> ---
> I love this radio stuff !
> 72, 73 Terry, WAØITP
> wa0itp@...
> www.wa0itp.com
> www.4sqrp.com
> www.qrpspots.com
>
>
>
> ----- Original Message -----
> From: "Paul" <paul.d.rose@...>
> To: <SS-40@yahoogroups.com>
> Sent: Wednesday, June 01, 2011 10:09 PM
> Subject: [SS-40] So Close!
>
>
> | Almost finished tonight, but am mising C15 (120pF). Guess I should
> have inventoried :)
> |
> | The closest match in my junk box is 150pF
> |
> | The parallel combination of C15 (at 150pf) and midrange TC3 would be
> 190pF (instead of 160pf)
> |
> | If I wound L4 with 26 turns instead of 29, I should get 2.7uH
> instead of 3.3uH (according to one of Diz's charts).
> |
> | I think this should put me back near 7.0MHz at midrange of TC3 for
> the last tuned circuit before the mixer.
> |
> | Is this a reasonable compromise, or should I look harder for a

```
> 120pf?
> |
> | I absolutely don't want to have you guys mail out a single cap.
> |
> |
> |
> | Paul - K0EET
> |
> |
> |
> | ------------------------------------
> |
> | Yahoo! Groups Links
> |
> |
> |
>
```

# 63. Re: [SS-40] So Close!

Yahoo group: SS-40
Date: 2011-06-02 13:48:20 UTC
From: Jim Kortge
Topic: 59  Message: 63

On 6/1/2011 11:09 PM, Paul, K0EET wrote:
> Almost finished tonight, but am mising C15 (120pF).

Rats....I hate when that happens!

Guess I should have inventoried :)

Same results, you're still missing the part. Wish I could teleport
one from my stock to you.

>
> The closest match in my junk box is 150pF

That should work fine.

>
> The parallel combination of C15 (at 150pf) and midrange TC3 would be 190pF (instead of
160pf)
>
> If I wound L4 with 26 turns instead of 29, I should get 2.7uH instead of 3.3uH (according
to one of Diz's charts).
>
> I think this should put me back near 7.0MHz at midrange of TC3 for the last tuned circuit
before the mixer.
>
> Is this a reasonable compromise, or should I look harder for a 120pf?

I just redid your calculations and you are spot on. Should work fine
at 150 pF with 26 turns on the toroid. The proof is whether you see
that circuit peak twice as the trimmer is rotated through 360 degrees.
>
> I absolutely don't want to have you guys mail out a single cap.

Why not, it was our mistake. If Terry doesn't have a spare, I can
send you one if you want to wait. If not, try the 150 pF.
>
>
>
> Paul - K0EET

72,

Jim, K8IQY

>
>

# 64. Re: [SS-40] Re: So Close!

Yahoo group: SS-40
Date: 2011-06-02 14:00:14 UTC
From: Jim Kortge
Topic: 59  Message: 64

On 6/2/2011 1:18 AM, Paul wrote:
> Found an old drawer with some unmarked disk ceramics (from one of those old $5 "500 piece grab bags" at Dan's Small Parts) . One measures 122pF on my AADE LC meter. Looks like I'm in business. Sometimes pays to be a pack-rat. Thanks for the help.
>
> Paul - K0EET

Paul,

If it isn't an NP0 type capacitor it will drift and probably be lossy
as can be. Maybe not a good choice. A 150 pF NP0 should work fine
per our earlier posts.

72,

Jim, K8IQY

# 65. Re: [SS-40] Re: So Close!

Yahoo group: SS-40
Date: 2011-06-02 14:11:16 UTC
From: WA0ITP
Topic: 59  Message: 65

Paul,

I have a 150p NP0 in an envelope and will drop it in the mail to you
this morning. You're good on QRZ right?
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Jim Kortge" <jim.k8iqy@...>
To: <SS-40@yahoogroups.com>
Sent: Thursday, June 02, 2011 9:00 AM
Subject: Re: [SS-40] Re: So Close!

| On 6/2/2011 1:18 AM, Paul wrote:
| > Found an old drawer with some unmarked disk ceramics (from one of
those old $5 "500 piece grab bags" at Dan's Small Parts) . One
measures 122pF on my AADE LC meter. Looks like I'm in business.
Sometimes pays to be a pack-rat. Thanks for the help.
| >
| > Paul - K0EET
|
| Paul,
|
| If it isn't an NP0 type capacitor it will drift and probably be
lossy
| as can be. Maybe not a good choice. A 150 pF NP0 should work fine
| per our earlier posts.
|
| 72,
|
| Jim, K8IQY
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 66. Re: So Close!

Yahoo group: SS-40
Date: 2011-06-02 15:08:28 UTC
From: Paul
Topic: 59  Message: 66

Thanks Terry.

My QRZ.com address is correct.

Neither my unmarked 120pF nor my marked 150pF are NP0.

Paul - K0EET

--- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@...> wrote:
>
> Paul,
>
> I have a 150p NP0 in an envelope and will drop it in the mail to you
> this morning. You're good on QRZ right?
> ---
> I love this radio stuff !
> 72, 73 Terry, WAØITP
> wa0itp@...
> www.wa0itp.com
> www.4sqrp.com
> www.qrpspots.com
>

# 67. Documentation download speeds.

Yahoo group: SS-40
Date: 2011-06-02 16:03:47 UTC
From: Stephen Farthing
Topic: 67  Message: 67

Jim,

I am not sure if it is a problem for anyone else but i have tried to download the build instructions a few times now, the PDF takes for ever and I have to cancel it. I have a fast broadband connection here and most downloads arrive in a heartbeat....

Would it be possible to load all of the documentation to the files section of the news group and see if this makes a difference?

73s Steve

PS the kit arrived today and I am very pleased....
--
It is vain to do with more that which can be done with less.

# 68. Re: So Close!

Yahoo group: SS-40
Date: 2011-06-02 16:17:51 UTC
From: Paul
Topic: 59  Message: 68

Wow. I hadn't looked myself up on QRZ for ages.

The address is right, but somehow they attached a photo of Hal Harris, SK, the former holder of K0EET. I removed the pic.

--- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@...> wrote:
> this morning. You're good on QRZ right?

# 69. Re: [SS-40] Documentation download speeds.

Yahoo group: SS-40
Date: 2011-06-02 16:30:57 UTC
From: WA0ITP
Topic: 67  Message: 69
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Stephen,

This is the first report of slow download speeds. I wonder if your problem is with your ISP.

Attached is a copy if the assembly manual for you.
---
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Stephen Farthing
To: SS-40@yahoogroups.com
Sent: Thursday, June 02, 2011 11:03 AM
Subject: [SS-40] Documentation download speeds.

Jim,

I am not sure if it is a problem for anyone else but i have tried to download the build instructions a few times now, the PDF takes for ever and I have to cancel it. I have a fast broadband connection here and most downloads arrive in a heartbeat....

Would it be possible to load all of the documentation to the files section of the news group and see if this makes a difference?

73s Steve

PS the kit arrived today and I am very pleased....
--
It is vain to do with more that which can be done with less.

# 70. Re: [SS-40] Documentation download speeds.

Yahoo group: SS-40
Date: 2011-06-02 18:21:21 UTC
From: Jim Kortge
Topic: 67  Message: 70

On 6/2/2011 12:03 PM, Stephen Farthing wrote:
> Jim,

Hi Steve,

>
> I am not sure if it is a problem for anyone else but i have tried to
> download the build instructions a few times now, the PDF takes for ever and
> I have to cancel it. I have a fast broadband connection here and most
> downloads arrive in a heartbeat....

Don't know why this is happening.

>
> Would it be possible to load all of the documentation to the files section
> of the news group and see if this makes a difference?

I'm doing that as I type this. I hope there isn't some silly
restriction on the size of files that can be in the files section.
That might be a deal killer!

>
> 73s Steve

72,

Jim, K8IQY

>
> PS the kit arrived today and I am very pleased....

That was very good service from the colonies.....

PPS....Yahoo will only allow files smaller then 5 Meg, so will have to
think of another method. Rats!!

# 71. Re: [SS-40] Documentation download speeds.

Yahoo group: SS-40
Date: 2011-06-02 18:26:58 UTC
From: Stephen Farthing
Topic: 67  Message: 71

Jim,

I have the file now thanks to the kindness of another kit builder. So no worries.

I really like the design and am looking forward to building it...

73s Steve

On 2 June 2011 19:21, Jim Kortge <jim.k8iqy@...> wrote:

>
>
> On 6/2/2011 12:03 PM, Stephen Farthing wrote:
> > Jim,
>
> Hi Steve,
>
>
> >
> > I am not sure if it is a problem for anyone else but i have tried to
> > download the build instructions a few times now, the PDF takes for ever
> and
> > I have to cancel it. I have a fast broadband connection here and most
> > downloads arrive in a heartbeat....
>
> Don't know why this is happening.
>
>
> >
> > Would it be possible to load all of the documentation to the files
> section
> > of the news group and see if this makes a difference?
>
> I'm doing that as I type this. I hope there isn't some silly
> restriction on the size of files that can be in the files section.
> That might be a deal killer!
>
> >
> > 73s Steve
>
> 72,
>
> Jim, K8IQY
>
>

> >
> > PS the kit arrived today and I am very pleased....
>
> That was very good service from the colonies.....
>
> PPS....Yahoo will only allow files smaller then 5 Meg, so will have to
> think of another method. Rats!!
>
>
>

--
It is vain to do with more that which can be done with less.

# 72. Re: [SS-40] Documentation download speeds.

Yahoo group: SS-40
Date: 2011-06-02 19:29:25 UTC
From: Jim Kortge
Topic: 67  Message: 72

On 6/2/2011 2:26 PM, Stephen Farthing wrote:
> Jim,
>
> I have the file now thanks to the kindness of another kit builder. So no
> worries.
>
> I really like the design and am looking forward to building it...
>
> 73s Steve
>

Steve,

Thanks for the update, but I'd still like to get the most useful files up on the Yahoo web site. I remember we had this problem with the 2N2/40+ documentation and some kind soul had a PDF splitting program the could actually split the file in half. I just tried that with PDFSAM and both file parts were only a few K smaller than the starting file. No joy there!!

72,

Jim, K8IQY

# 73. Re: SS-40 Revised Assembly Manual

Yahoo group: SS-40
Date: 2011-06-02 20:53:27 UTC
From: Jerry
Topic: 29  Message: 73

OK, Jim, no problem. I'm now caught up on all the changes.

By the way, I mistakenly referred to the latest manual as "v.1.0H". That is the PCB version number on the title page of the manual. Sorry if I misled anyone!

Thanks again.

Jerry AA6KI

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 6/1/2011 8:25 PM, Jerry wrote:
> > Jim,
>
> Hi Jerry,
>
> >
> > I just obtained the latest manual (v.1.0H) -- thanks.
>
> Terry has been doing a fantastic job keeping up with me sending him
> newer versions.
>
> Editing isn't the most fun in the world, I know, but would it
> possible to provide a separate errata/change sheet?
>
> Sorry, I don't have that nor the ability to create it accurately. As
> the changes came in via the group, I created a revised version with
> those items that were pointed out to be incorrect or missing.. We've
> gone from V1.0B2 to V1.0B5, which is the version now posted on Terry's
> SS-40 web site, all in about 48 hours. My suggestion is to use your
> older version as you go along and when you hit something that should
> be there but isn't, print out a replacement page. The change should
> be there unless you discover something else. Or open up the old
> version and the latest with a PDF reader and compare pages.
>
> I've already printed out an earlier version and would prefer to
> pencil in the changes (or print selected pages) rather than reprint
> the whole thing.
>
> Yes, I understand but can't help as I didn't keep a log of the changes
> that I made.
> >
> > Thanks for keeping us all informed.
>
> Doing my best.....
>

> I'm really looking forward to getting on with the build!
>
> Good luck!
> >
> > 73.
> >
> > Jerry AA6KI
>
> 72,
>
> Jim, K8IQY
>

# 74. Re: So Close!

Yahoo group: SS-40
Date: 2011-06-03 03:00:14 UTC
From: Paul
Topic: 59  Message: 74

I went ahead and wound L4 for 26 turns and tack-soldered the 150pF that I had to the top of the board as C15. I'll replace it with the NP0 that Terry is sending when it gets here.

I get a sharp peak from TC2, but not quite as definite from TC3 (using band noise).

Plenty of strong CW signals over the whole tuning range just using my attic 40M dipole. Stable as a rock.

I look forward to figuring out an enclosure.

Thanks for all the help.

Paul - K0EET

# 75. Re: [SS-40] Re: So Close!

Yahoo group: SS-40
Date: 2011-06-03 03:14:21 UTC
From: WA0ITP
Topic: 59  Message: 75

Excellent Paul, congrats!

"I look forward to figuring out an enclosure." Jim designed the board to fit aTen Tec TP-41 and also supplied a drilling template for it http://www.wa0itp.com/ss40tp41drilltemplate.pdf

It will print at the correct size and places the holes at the correct locations for both teh front ant rear panels. I'm in the process of developing a decal sheet for the TP-41 panels also.

The TP-41 is the one recommended for the MagicBox, and with a little trimming of the board edges, the NS-40 will fit in one also. Those three would make a nice looking stack.

---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Paul" <paul.d.rose@...>
To: <SS-40@yahoogroups.com>
Sent: Thursday, June 02, 2011 10:00 PM
Subject: [SS-40] Re: So Close!

|I went ahead and wound L4 for 26 turns and tack-soldered the 150pF that I had to the top of the board as C15. I'll replace it with the NP0 that Terry is sending when it gets here.
|
| I get a sharp peak from TC2, but not quite as definite from TC3 (using band noise).
|
| Plenty of strong CW signals over the whole tuning range just using my attic 40M dipole. Stable as a rock.
|
| I look forward to figuring out an enclosure.
|
| Thanks for all the help.
|
| Paul - K0EET
|
|
|

```
|
|
|
| ------------------------------------
|
| Yahoo! Groups Links
|
|
|
```

# 76. Step 7 - crystals

Yahoo group: SS-40
Date: 2011-06-03 08:58:08 UTC
From: O. Alan Jones
Topic: 76  Message: 76

Good morning Folks,
I have a question on step 7. I have four 9.21 mhz crystals that are labeled in pen:
684, 687, 686, 686

What are these numbers for? Also, as you can tell I am a slow builder, lol.

Alan
N8WQ

# 77. Re: Step 7 - crystals

Yahoo group: SS-40
Date: 2011-06-03 12:31:33 UTC
From: Paul
Topic: 76  Message: 77

Hi Alan,

I'm sure Jim will chime in with the definitive answer, but I think I have a pretty good guess.

A large batch of crystals were purchased, tested in an oscillator, and sorted by the kitters into batches of four that had a close match. Part of that sorting process was writing down last few digits from the frequency measurement on each crystal.

Having the four crystals "match" each other is more important for the filter than their absolute frequency (the BFO can be always be tuned to allow for the center frequency of the filter).

Paul - K0EET

--- In SS-40@yahoogroups.com, "O. Alan Jones" <oalanjones@...> wrote:
>
> Good morning Folks,
> I have a question on step 7. I have four 9.21 mhz crystals that are
> labeled in pen:
> 684, 687, 686, 686
>
> What are these numbers for? Also, as you can tell I am a slow builder, lol.
>
> Alan
> N8WQ
>

# 78. Re: So Close!

Yahoo group: SS-40
Date: 2011-06-03 12:36:35 UTC
From: Paul
Topic: 59  Message: 78

Thanks Terry. I ordered a trio of the bare aluminum TP-41.

Not sure if I'll do an NS-40, but it's a nice enclosure for a reasonable price. I'm sure I'll find something to put in that 3rd one.

--- In SS-40@...m, "WA0ITP" <wa0itp@...> wrote:
> The TP-41 is the one recommended for the MagicBox, and with a little
> trimming of the board edges, the NS-40 will fit in one also. Those
> three would make a nice looking stack.

# 79. Re: [SS-40] Step 7 - crystals

Yahoo group: SS-40
Date: 2011-06-03 13:20:42 UTC
From: WA0ITP
Topic: 76  Message: 79

GM Alan,

The crystals with the numbers have been matched by Jim for use in the IF fIlter, X1, X2, X3, X4. The remaining (unmarked) 9.215 crystal is for X5.
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "O. Alan Jones" <oalanjones@...>
To: <SS-40@yahoogroups.com>
Sent: Friday, June 03, 2011 3:58 AM
Subject: [SS-40] Step 7 - crystals

| Good morning Folks,
| I have a question on step 7. I have four 9.21 mhz crystals that are
| labeled in pen:
| 684, 687, 686, 686
|
| What are these numbers for? Also, as you can tell I am a slow
builder, lol.
|
| Alan
| N8WQ
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 80. Re: [SS-40] Step 7 - crystals

Yahoo group: SS-40
Date: 2011-06-03 13:22:56 UTC
From: Jim Kortge
Topic: 76  Message: 80

On 6/3/2011 4:58 AM, O. Alan Jones wrote:
> Good morning Folks,

Hello Alan,

> I have a question on step 7. I have four 9.21 mhz crystals that are
> labeled in pen:
> 684, 687, 686, 686

Those are the last 3 digits of the series resonant frequency of the crystals to be used in the IF Filter. As you can see, they were matched to within 4 Hz of each other, so that the filter will work as designed. They were matched by me, and I've got the crystals here to do another 100+ sets. And yes, it is quite time consuming, but the results are well worth the effort.
>
> What are these numbers for?

See above.

Also, as you can tell I am a slow builder, lol.

I didn't know it was a race. Slow and steady usually is better.

>
> Alan
> N8WQ
>
>

72,

Jim, K8IQY

# 81. Re: [SS-40] Step 7 - crystals

Yahoo group: SS-40
Date: 2011-06-03 13:47:33 UTC
From: Jim Kortge
Topic: 76  Message: 81

On 6/3/2011 9:20 AM, WA0ITP wrote:
> GM Alan,
>
> The crystals with the numbers have been matched by Jim for use in the
> IF fIlter, X1, X2, X3, X4. The remaining (unmarked) 9.215 crystal is
> for X5.

Actually, it is marked "LO" so that it isn't confused with the other 4 filter elements.

To measure the series resonant frequency of each crystal, it is put into a test fixture, driven by a low phase noise signal generator and manually swept in frequency to find the resonance peak as indicated by an RMS voltmeter, and the last three digits of that frequency written on the crystal. After all of them are done, usually 300 to 500 units, they are sorted sequentially from lowest to highest, and groups of 4 units with a span of no more than 10 Hz are put into the envelopes supplied with the kits. Crystal which can't be matched and those with low outputs (lossy units) go into the pile used for LO service.

Now you know that rest of the story! :-)

72,

Jim, K8IQY

# 82. Grounding Crystal Cases on the SS-40 Receiver

Yahoo group: SS-40
Date: 2011-06-03 20:53:11 UTC
From: Jim Kortge
Topic: 82  Message: 82

Builders,

It has come to my attention that some of your are ignoring the Assembly Manual advice to ground the cases of the crystals in the VXO, Crystal Filter and LO.

Here is what will happen if you don't:

VXO - you will have a tuning range of ~17 KHz instead of the ~28 KHz that most builders are seeing.

Crystal Filter - you will have reduced opposite sideband rejection.

LO - the receiver may not setup with the correct offset (600-750 Hz CW note) like it should.

So, that step is very important. Look at the photos in the Assembly Manual so see how the grounding is done.

72,

Jim, K8IQY

# 83. New file uploaded to SS-40

Yahoo group: SS-40
Date: 2011-06-03 21:06:00 UTC
From: SS-40@yahoogroups.com
Topic: 83  Message: 83

```
Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SS-40
group.

File : /SS-40 Documentation/AudioOutputSpectrum-NoAntenna.jpg
Uploaded by : k8iqy <jim.k8iqy@...>
Description : SS-40 Audio Spectrum without an antenna

You can access this file at the URL:
http://groups.yahoo.com/group/SS-40/files/SS-40%20Documentation/AudioOutputSpectrum-NoAnte
nna.jpg

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

k8iqy <jim.k8iqy@...>
```

# 84. New file uploaded to SS-40

Yahoo group: SS-40
Date: 2011-06-03 21:08:29 UTC
From: SS-40@yahoogroups.com
Topic: 83  Message: 84

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SS-40
group.

File : /SS-40 Documentation/FFTSpectrumAnalyzerLogo.jpg
Uploaded by : k8iqy <jim.k8iqy@...>
Description : Where to download the Audio Spectrum Analyzer Software

You can access this file at the URL:
http://groups.yahoo.com/group/SS-40/files/SS-40%20Documentation/FFTSpectrumAnalyzerLogo.jpg

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

k8iqy <jim.k8iqy@...>

# 85. Grounding Crystal Cases on the SS-40 Receiver

Yahoo group: SS-40
Date: 2011-06-03 21:29:35 UTC
From: Jim Kortge
Topic: 82  Message: 85

Builders,

It has come to my attention that some of you are ignoring the Assembly Manual advice to ground the cases of the crystals in the VXO, Crystal Filter and LO.

Here is what will happen if you don't ground them:

VXO - you will have a tuning range of ~17 KHz instead of the ~28 KHz that most builders are seeing.

Crystal Filter - you will have reduced opposite sideband rejection.

LO - the receiver may not setup with the correct offset (600-750 Hz CW note) like it should.

So, that step is very important. Look at the photos in the Assembly Manual so see how the grounding is done.

72,

Jim, K8IQY

# 86. Test from Jim, K8IQY - Ignore

Yahoo group: SS-40
Date: 2011-06-04 01:54:50 UTC
From: Jim Kortge
Topic: 86  Message: 86

Did this get through?

# 87. Tuning range

Yahoo group: SS-40
Date: 2011-06-04 02:10:17 UTC
From: Paul
Topic: 87  Message: 87

I'm getting 22.5 kHz (16,230.0 though 16,252.5) from the VXO, which is about right.

But 99% of the range comes from the last half of the tuning control (i.e. almost no change in VXO frequency from 8:00 to 12:00 on the knob, almost all of the change from 12:00 to 4:00).

Is this to be expected? Can the unused "TBD" R30 be used to help this out?

Paul - K0EET

# 88. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 03:11:56 UTC
From: Paul
Topic: 87  Message: 88

With power off, my VR2 measures like a 5K audio taper.

With power on I get almost no voltage change at the center terminal of VR2 over the first 1/2 of the range and a nearly linear voltage change over the 2nd half of the range.

I didn't measure it out of circuit.

I think this might explain my tuning behavior.

--- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@...> wrote:
>
> I'm getting 22.5 kHz (16,230.0 though 16,252.5) from the VXO, which is about right.
>
> But 99% of the range comes from the last half of the tuning control (i.e. almost no change in VXO frequency from 8:00 to 12:00 on the knob, almost all of the change from 12:00 to 4:00).
>
> Is this to be expected? Can the unused "TBD" R30 be used to help this out?
>
> Paul - K0EET
>

# 89. Re: [SS-40] missing crystal spacers

Yahoo group: SS-40
Date: 2011-06-04 11:25:50 UTC
From: Carlo Strozzi
Topic: 89  Message: 89

Hi all,

I have just received my SS-40 and I'm going to start putting it together this afternoon. I've just finished inventorying the parts, and everything was there, except for "8 xtal spacers". I believe those can be made out of anything, I'll cut them out from the yellow paper envelope containing the xtals and I think that'll do fine, but I'm pointing this out so that Jim may want to fix the part list accordingly.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 90. Re: [SS-40] missing crystal spacers

Yahoo group: SS-40
Date: 2011-06-04 14:13:34 UTC
From: WA0ITP
Topic: 89  Message: 90

Thanx Carlo,

I just changed the the parts list.
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Carlo Strozzi" <carlos@...>
To: <SS-40@yahoogroups.com>
Sent: Saturday, June 04, 2011 6:25 AM
Subject: Re: [SS-40] missing crystal spacers

| Hi all,
|
| I have just received my SS-40 and I'm going to start putting it
together
| this afternoon. I've just finished inventorying the parts, and
everything
| was there, except for "8 xtal spacers". I believe those can be made
out of
| anything, I'll cut them out from the yellow paper envelope
containing
| the xtals and I think that'll do fine, but I'm pointing this out so
that
| Jim may want to fix the part list accordingly.
|
| ciao,
| Carlo
|
| --
| Software Patents kill Innovation: say NO to Software Patents!
| I Brevetti Software uccidono l'innovazione: di NO ai Brevetti
Software!
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 91. Re: [SS-40] Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 14:20:59 UTC
From: WA0ITP
Topic: 87  Message: 91

GM Paul,

That would expain it. Sounds like an audio or perhaps a defective pot. Linears were ordered so hopefully this is an isolated case. I'll send you a new pot asap.

Has anyone else seen this tuning rate problem?

---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Paul" <paul.d.rose@...>
To: <SS-40@yahoogroups.com>
Sent: Friday, June 03, 2011 10:11 PM
Subject: [SS-40] Re: Tuning range

| With power off, my VR2 measures like a 5K audio taper.
|
| With power on I get almost no voltage change at the center terminal of VR2 over the first 1/2 of the range and a nearly linear voltage change over the 2nd half of the range.
|
| I didn't measure it out of circuit.
|
| I think this might explain my tuning behavior.
|
|
|
|
|
| --- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@...> wrote:
| >
| > I'm getting 22.5 kHz (16,230.0 though 16,252.5) from the VXO, which is about right.
| >
| > But 99% of the range comes from the last half of the tuning control (i.e. almost no change in VXO frequency from 8:00 to 12:00 on the knob, almost all of the change from 12:00 to 4:00).
| >
| > Is this to be expected? Can the unused "TBD" R30 be used to

```
help this out?
| >
| > Paul - K0EET
| >
|
|
|
|
| ------------------------------------
|
| Yahoo! Groups Links
|
|
|
```

# 92. Re: [SS-40] missing crystal spacers

Yahoo group: SS-40
Date: 2011-06-04 14:56:51 UTC
From: Carlo Strozzi
Topic: 89  Message: 92

On Sat, Jun 04, 2011 at 09:13:34AM -0500, WA0ITP wrote:
> Thanx Carlo,
>
> I just changed the the parts list.

Thank-you Terry.

Here's another one:

Page 5 of the manual says "TC4-10-70 pF", but that's "9.8-60pF" in
the parts list.

I'll post more if I find any, while I procede with the build.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 93. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 15:00:19 UTC
From: Paul
Topic: 87  Message: 93

Thanks Terry,

This was one of the "early" 5K ones vs the "later" 10K shown in the schematic.

Mine is labelled "Alpha A5K". Google says that A5K is audio, while B5K is linear. The volume pot is labelled A1K, which makes sense there.

Other than that quirk, it's working fine, so no rush.

Paul - K0EET

--- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@...> wrote:
>
> GM Paul,
>
> That would expain it. Sounds like an audio or perhaps a defective
> pot. Linears were ordered so hopefully this is an isolated case. I'll
> send you a new pot asap.
>
> Has anyone else seen this tuning rate problem?
>
> ---
> I love this radio stuff !
> 72, 73 Terry, WAØITP
> wa0itp@...
> www.wa0itp.com
> www.4sqrp.com
> www.qrpspots.com
>
>
>
> ----- Original Message -----
> From: "Paul" <paul.d.rose@...>
> To: <SS-40@yahoogroups.com>
> Sent: Friday, June 03, 2011 10:11 PM
> Subject: [SS-40] Re: Tuning range
>
>
> | With power off, my VR2 measures like a 5K audio taper.
> |
> | With power on I get almost no voltage change at the center terminal
> of VR2 over the first 1/2 of the range and a nearly linear voltage
> change over the 2nd half of the range.
> |
> | I didn't measure it out of circuit.
> |

> | I think this might explain my tuning behavior.
> |
> |
> |
> |
> |
> | --- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@> wrote:
> | >
> | > I'm getting 22.5 kHz (16,230.0 though 16,252.5) from the VXO,
> which is about right.
> | >
> | > But 99% of the range comes from the last half of the tuning
> control (i.e. almost no change in VXO frequency from 8:00 to 12:00 on
> the knob, almost all of the change from 12:00 to 4:00).
> | >
> | > Is this to be expected? Can the unused "TBD" R30 be used to
> help this out?
> | >
> | > Paul - K0EET
> | >
> |
> |
> |
> |
> | ----------
> |
> | Yahoo! Groups Links
> |
> |
> |
>

# 94. Re: [SS-40] Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 15:18:54 UTC
From: Carlo Strozzi
Topic: 87  Message: 94

On Sat, Jun 04, 2011 at 03:00:19PM -0000, Paul wrote:
> Thanks Terry,
>
> This was one of the "early" 5K ones vs the "later" 10K shown in the schematic.
>
> Mine is labelled "Alpha A5K". Google says that A5K is audio, while B5K is linear. The volume pot is labelled A1K, which makes sense there.

Same problem here Terry. I've got one B1K in my junk, but maybe it's
too little, let's see what Jim says about using that one.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 95. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 15:24:13 UTC
From: Jerry AA6KI
Topic: 87  Message: 95

I finally finished my parts inventory (all accounted for!) and will start my build today. But I also received the early 5K tune pot -- should I be requesting a replacement? What is the real-world difference between the 5K and the 10K?

Any comments/advice much appreciated!

Jerry AA6KI

--- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@...> wrote:
>
> Thanks Terry,
>
> This was one of the "early" 5K ones vs the "later" 10K shown in the schematic.
>
> Mine is labelled "Alpha A5K". Google says that A5K is audio, while B5K is linear. The volume pot is labelled A1K, which makes sense there.
>
> Other than that quirk, it's working fine, so no rush.
>
> Paul - K0EET
>
> --- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@> wrote:
> >
> > GM Paul,
> >
> > That would expain it. Sounds like an audio or perhaps a defective
> > pot. Linears were ordered so hopefully this is an isolated case. I'll
> > send you a new pot asap.
> >
> > Has anyone else seen this tuning rate problem?
> >
> > ---------------------------------------------------------------------
> > I love this radio stuff !
> > 72, 73 Terry, WAØITP
> > wa0itp@
> > www.wa0itp.com
> > www.4sqrp.com
> > www.qrpspots.com
> >
> >
> >
> > ----- Original Message -----
> > From: "Paul" <paul.d.rose@>
> > To: <SS-40@yahoogroups.com>
> > Sent: Friday, June 03, 2011 10:11 PM
> > Subject: [SS-40] Re: Tuning range

```
> >
> >
> > | With power off, my VR2 measures like a 5K audio taper.
> > |
> > | With power on I get almost no voltage change at the center terminal
> > of VR2 over the first 1/2 of the range and a nearly linear voltage
> > change over the 2nd half of the range.
> > |
> > | I didn't measure it out of circuit.
> > |
> > | I think this might explain my tuning behavior.
> > |
> > |
> > |
> > |
> > |
> > | --- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@> wrote:
> > | >
> > | > I'm getting 22.5 kHz (16,230.0 though 16,252.5) from the VXO,
> > which is about right.
> > | >
> > | > But 99% of the range comes from the last half of the tuning
> > control (i.e. almost no change in VXO frequency from 8:00 to 12:00 on
> > the knob, almost all of the change from 12:00 to 4:00).
> > | >
> > | > Is this to be expected? Can the unused "TBD" R30 be used to
> > help this out?
> > | >
> > | > Paul - K0EET
> > | >
> > |
> > |
> > |
> > |
> > | ------------------------------------
> > |
> > | Yahoo! Groups Links
> > |
> > |
> > |
> >
>
```

# 96. Re: [SS-40] Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 15:55:25 UTC
From: WA0ITP
Topic: 87  Message: 96

HI Jerry,

Jim covered this awhile back, message # in the 30's.
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Jerry AA6KI" <jpalsson@...>
To: <SS-40@yahoogroups.com>
Sent: Saturday, June 04, 2011 10:24 AM
Subject: [SS-40] Re: Tuning range

I finally finished my parts inventory (all accounted for!) and will
start my build today. But I also received the early 5K tune pot --
should I be requesting a replacement? What is the real-world
difference between the 5K and the 10K?

Any comments/advice much appreciated!

Jerry AA6KI

--- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@...> wrote:
>
> Thanks Terry,
>
> This was one of the "early" 5K ones vs the "later" 10K shown in the
> schematic.
>
> Mine is labelled "Alpha A5K". Google says that A5K is audio, while
> B5K is linear. The volume pot is labelled A1K, which makes sense
> there.
>
> Other than that quirk, it's working fine, so no rush.
>
> Paul - K0EET
>
> --- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@> wrote:
> >
> > GM Paul,
> >
> > That would expain it. Sounds like an audio or perhaps a defective

> > pot. Linears were ordered so hopefully this is an isolated case.
> > I'll
> > send you a new pot asap.
> >
> > Has anyone else seen this tuning rate problem?
> >
> > ----------
> > I love this radio stuff !
> > 72, 73 Terry, WA?ITP
> > wa0itp@
> > www.wa0itp.com
> > www.4sqrp.com
> > www.qrpspots.com
> >
> >
> >
> > ----- Original Message -----
> > From: "Paul" <paul.d.rose@>
> > To: <SS-40@yahoogroups.com>
> > Sent: Friday, June 03, 2011 10:11 PM
> > Subject: [SS-40] Re: Tuning range
> >
> >
> > | With power off, my VR2 measures like a 5K audio taper.
> > |
> > | With power on I get almost no voltage change at the center
> > terminal
> > of VR2 over the first 1/2 of the range and a nearly linear voltage
> > change over the 2nd half of the range.
> > |
> > | I didn't measure it out of circuit.
> > |
> > | I think this might explain my tuning behavior.
> > |
> > |
> > |
> > |
> > |
> > | --- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@> wrote:
> > | >
> > | > I'm getting 22.5 kHz (16,230.0 though 16,252.5) from the VXO,
> > which is about right.
> > | >
> > | > But 99% of the range comes from the last half of the tuning
> > control (i.e. almost no change in VXO frequency from 8:00 to 12:00
> > on
> > the knob, almost all of the change from 12:00 to 4:00).
> > | >
> > | > Is this to be expected? Can the unused "TBD" R30 be used to
> > help this out?

```
> > | >
> > | > Paul - K0EET
> > | >
> > |
> > |
> > |
> > |
> > | ------------------------------------
> > |
> > | Yahoo! Groups Links
> > |
> > |
> > |
> >
>

------------------------------------

Yahoo! Groups Links
```

# 97. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 15:57:38 UTC
From: Paul
Topic: 87  Message: 97

5K works fine, but the audio taper is a bit annoying.

I'd definitely measure first to make sure that I'm right about the audio taper thing (and that I don't just have a bad pot). Very easy, especially if you haven't soldered it in yet.

Just set the pot to midrange an measure k-ohms from center to left lead and center to right lead. They will be roughly equal (near 2.5K) for linear, and nowhere near equal for audio.

--- In SS-40@yahoogroups.com, "Jerry AA6KI" <jpalsson@...> wrote:
>
> I finally finished my parts inventory (all accounted for!) and will start my build today. But I also received the early 5K tune pot -- should I be requesting a replacement? What is the real-world difference between the 5K and the 10K?
>
> Any comments/advice much appreciated!
>
> Jerry AA6KI
>

# 98. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 16:16:55 UTC
From: Jerry AA6KI
Topic: 87  Message: 98

Thanks, Paul. Just checked mine -- it's an Alpha, labeled A5K.
Happy to report that it's linear.

--- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@...> wrote:
>
> 5K works fine, but the audio taper is a bit annoying.
>
> I'd definitely measure first to make sure that I'm right about the audio taper thing (and that I don't just have a bad pot). Very easy, especially if you haven't soldered it in yet.
>
> Just set the pot to midrange an measure k-ohms from center to left lead and center to right lead. They will be roughly equal (near 2.5K) for linear, and nowhere near equal for audio.
>
>
> --- In SS-40@yahoogroups.com, "Jerry AA6KI" <jpalsson@> wrote:
> >
> > I finally finished my parts inventory (all accounted for!) and will start my build today. But I also received the early 5K tune pot -- should I be requesting a replacement? What is the real-world difference between the 5K and the 10K?
> >
> > Any comments/advice much appreciated!
> >
> > Jerry AA6KI
> >
>

# 99. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 16:23:27 UTC
From: Jerry AA6KI
Topic: 87  Message: 99

Much appreciated, Terry. Somehow I missed that discussion. You're right -- Jim covered it in Message #40.

Jerry AA6KI

--- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@...> wrote:
>
> HI Jerry,
>
> Jim covered this awhile back, message # in the 30's.
> ---
> I love this radio stuff !
> 72, 73 Terry, WAØITP
> wa0itp@...
> www.wa0itp.com
> www.4sqrp.com
> www.qrpspots.com
>
>
>
> ----- Original Message -----
> From: "Jerry AA6KI" <jpalsson@...>
> To: <SS-40@yahoogroups.com>
> Sent: Saturday, June 04, 2011 10:24 AM
> Subject: [SS-40] Re: Tuning range
>
>
> I finally finished my parts inventory (all accounted for!) and will
> start my build today. But I also received the early 5K tune pot --
> should I be requesting a replacement? What is the real-world
> difference between the 5K and the 10K?
>
> Any comments/advice much appreciated!
>
> Jerry AA6KI
>
> --- In SS-40@...m, "Paul" <paul.d.rose@> wrote:
> >
> > Thanks Terry,
> >
> > This was one of the "early" 5K ones vs the "later" 10K shown in the
> > schematic.
> >
> > Mine is labelled "Alpha A5K". Google says that A5K is audio, while
> > B5K is linear. The volume pot is labelled A1K, which makes sense

> > there.
> >
> > Other than that quirk, it's working fine, so no rush.
> >
> > Paul - K0EET
> >
> > --- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@> wrote:
> > >
> > > GM Paul,
> > >
> > > That would expain it. Sounds like an audio or perhaps a defective
> > > pot. Linears were ordered so hopefully this is an isolated case.
> > > I'll
> > > send you a new pot asap.
> > >
> > > Has anyone else seen this tuning rate problem?
> > >
> > > ---
> > > I love this radio stuff !
> > > 72, 73 Terry, WAØITP
> > > wa0itp@
> > > www.wa0itp.com
> > > www.4sqrp.com
> > > www.qrpspots.com
> > >
> > >
> > >
> > > ----- Original Message -----
> > > From: "Paul" <paul.d.rose@>
> > > To: <SS-40@yahoogroups.com>
> > > Sent: Friday, June 03, 2011 10:11 PM
> > > Subject: [SS-40] Re: Tuning range
> > >
> > >
> > > | With power off, my VR2 measures like a 5K audio taper.
> > > |
> > > | With power on I get almost no voltage change at the center
> > > terminal
> > > of VR2 over the first 1/2 of the range and a nearly linear voltage
> > > change over the 2nd half of the range.
> > > |
> > > | I didn't measure it out of circuit.
> > > |
> > > | I think this might explain my tuning behavior.
> > > |
> > > |
> > > |
> > > |
> > > |
> > > | --- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@> wrote:

```
> > > | >
> > > | > I'm getting 22.5 kHz (16,230.0 though 16,252.5) from the VXO,
> > > which is about right.
> > > | >
> > > | > But 99% of the range comes from the last half of the tuning
> > > control (i.e. almost no change in VXO frequency from 8:00 to 12:00
> > > on
> > > the knob, almost all of the change from 12:00 to 4:00).
> > > | >
> > > | > Is this to be expected? Can the unused "TBD" R30 be used to
> > > help this out?
> > > | >
> > > | > Paul - K0EET
> > > | >
> > > |
> > > |
> > > |
> > > |
> > > | ------------------------------------
> > > |
> > > | Yahoo! Groups Links
> > > |
> > > |
> > > |
> > >
> >
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
```

# 100. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 16:31:13 UTC
From: Paul
Topic: 87  Message: 100

That's good news. Maybe my problem was a one-off

--- In SS-40@yahoogroups.com, "Jerry AA6KI" <jpalsson@...> wrote:
>
> Thanks, Paul. Just checked mine -- it's an Alpha, labeled A5K.
> Happy to report that it's linear.
>
> --- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@> wrote:
> >
> > 5K works fine, but the audio taper is a bit annoying.
> >
> > I'd definitely measure first to make sure that I'm right about the audio taper thing (and that I don't just have a bad pot). Very easy, especially if you haven't soldered it in yet.
> >
> > Just set the pot to midrange an measure k-ohms from center to left lead and center to right lead. They will be roughly equal (near 2.5K) for linear, and nowhere near equal for audio.
> >
> >

# 101. Re: [SS-40] Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 16:35:25 UTC
From: Carlo Strozzi
Topic: 87  Message: 101

On Sat, Jun 04, 2011 at 04:31:13PM -0000, Paul wrote:
> That's good news. Maybe my problem was a one-off

Two-off: mine is also 5K audio, I checked with an ohmmeter :-/

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 102. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 16:42:06 UTC
From: Paul
Topic: 87  Message: 102

I just un-soldered mine to verify the out-of-circuit measurement.

800ohm vs 4.2K at mid scale.

Paul

--- In SS-40@yahoogroups.com, Carlo Strozzi <carlos@...> wrote:
>
> On Sat, Jun 04, 2011 at 04:31:13PM -0000, Paul wrote:
> > That's good news. Maybe my problem was a one-off
>
> Two-off: mine is also 5K audio, I checked with an ohmmeter :-/
>
> ciao,
> Carlo
>
> --
> Software Patents kill Innovation: say NO to Software Patents!
> I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!
>

# 103. Re: [SS-40] Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 16:49:35 UTC
From: Carlo Strozzi
Topic: 87  Message: 103

On Sat, Jun 04, 2011 at 04:42:06PM -0000, Paul wrote:
> I just un-soldered mine to verify the out-of-circuit measurement.
>
> 800ohm vs 4.2K at mid scale.

Same as mine, it's logaritmic, not linear :-/

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 104. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 16:57:45 UTC
From: Jerry AA6KI
Topic: 87  Message: 104

This is strange, isn't it? I'm just starting the build, so my pot is not yet installed. Full range measured at 4.9K. Turned to mid-point until it showed 2.45K, then measured left-to-center and center-to-right. Got 2.45K and 2.7K respectively. Yeah, the math doesn't add up exactly, but I figure it's close enough. I repeated the measurements with another DMM to confirm.

--- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@...> wrote:
>
> I just un-soldered mine to verify the out-of-circuit measurement.
>
> 800ohm vs 4.2K at mid scale.
>
> Paul
>
> --- In SS-40@yahoogroups.com, Carlo Strozzi <carlos@> wrote:
> >
> > On Sat, Jun 04, 2011 at 04:31:13PM -0000, Paul wrote:
> > > That's good news. Maybe my problem was a one-off
> >
> > Two-off: mine is also 5K audio, I checked with an ohmmeter :-/
> >
> > ciao,
> > Carlo
> >
> > --
> > Software Patents kill Innovation: say NO to Software Patents!
> > I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!
> >
>

# 105. Re: [SS-40] Tuning range

Yahoo group: SS-40
Date: 2011-06-04 16:59:37 UTC
From: Jim Kortge
Topic: 87  Message: 105

On 6/3/2011 10:10 PM, Paul wrote:
> I'm getting 22.5 kHz (16,230.0 though 16,252.5) from the VXO, which is about right.

A tad less than others are reporting, but acceptable I guess.
>
> But 99% of the range comes from the last half of the tuning control (i.e. almost no change in VXO frequency from 8:00 to 12:00 on the knob, almost all of the change from 12:00 to 4:00).

That is the result of having to use an audio taper pot for the tuning,
since the desired linear version of the pot style isn't available.
The other option was to use a reverse audio taper pot which moves the
tuning compaction to the other end of the dial.
>
> Is this to be expected?

Yes....

Can the unused "TBD" R30 be used to help this out?

Not really, putting something in there causes other tuning issues.
The real solution is to find a linear taper pot, but so far, no
sources are available for that part. Putting a large knob on the pot,
like 1.25 inch diameter helps alot.

72,

Jim, K8IQY

# 106. Re: [SS-40] Tuning range

Yahoo group: SS-40
Date: 2011-06-04 17:14:04 UTC
From: Carlo Strozzi
Topic: 87  Message: 106

On Sat, Jun 04, 2011 at 12:59:37PM -0400, Jim Kortge wrote:
>
> That is the result of having to use an audio taper pot for the tuning,
> since the desired linear version of the pot style isn't available.
> The other option was to use a reverse audio taper pot which moves the
> tuning compaction to the other end of the dial.

Jim,

I've got a 1K linear in my junk, is that value too low ? What you think ?
Would it put too much current throug D9 ? I fear that some VXO instability
may result.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 107. Re: [SS-40] missing crystal spacers

Yahoo group: SS-40
Date: 2011-06-04 17:25:48 UTC
From: Jim Kortge
Topic: 89  Message: 107

On 6/4/2011 7:25 AM, Carlo Strozzi wrote:
> Hi all,
>
> I have just received my SS-40 and I'm going to start putting it together
> this afternoon. I've just finished inventorying the parts, and everything
> was there, except for "8 xtal spacers". I believe those can be made out of
> anything, I'll cut them out from the yellow paper envelope containing
> the xtals and I think that'll do fine, but I'm pointing this out so that
> Jim may want to fix the part list accordingly.
>
> ciao,
> Carlo
>

Carlo,

I'll have to go back and look but I though I had taken those out of the Bill of Material. Thanks for pointing it out. Yes, you can use the little bag that the crystals came in for making the spacers. We had bought mylar crystal spacers, but the static electricity made it impossible to handle them. The kitters threatened to strike if we kept them in the parts set. I handed out several sets at Dayton, and the were truly nasty little devils to handle, sticking to each other, the table, my hands, etc. :-)

72 and thanks for purchasing a SS-40,

Jim, K8IQY

# 108. Re: [SS-40] Tuning range

Yahoo group: SS-40
Date: 2011-06-04 17:44:26 UTC
From: Jim Kortge
Topic: 87  Message: 108

On 6/4/2011 1:14 PM, Carlo Strozzi wrote:
> On Sat, Jun 04, 2011 at 12:59:37PM -0400, Jim Kortge wrote:
>>
>> That is the result of having to use an audio taper pot for the tuning,
>> since the desired linear version of the pot style isn't available.
>> The other option was to use a reverse audio taper pot which moves the
>> tuning compaction to the other end of the dial.
>
> Jim,

Hi Carlo,

>
> I've got a 1K linear in my junk, is that value too low ?

Yes, you really want it to be 5K and preferably, the 10K originally
specified.

What you think ?

I would not use it.

> Would it put too much current throug D9 ?

I tried a 1K linear pot in one of mine and was not happy with the
current draw and it didn't compensate with the R30 resistor properly.

I fear that some VXO instability
> may result.

That part is OK, it is the current draw that isn't acceptable.

72,

Jim, K8IQY

# 109. Re: [SS-40] Tuning range

Yahoo group: SS-40
Date: 2011-06-04 19:37:08 UTC
From: Carlo Strozzi
Topic: 87  Message: 109

On Sat, Jun 04, 2011 at 01:44:26PM -0400, Jim Kortge wrote:
>
> Hi Carlo,
>
> >
> > I've got a 1K linear in my junk, is that value too low ?
>
> Yes, you really want it to be 5K and preferably, the 10K originally
> specified.

Ok, I'm about to order parts from Mouser, do you have a suitable
Mouser part no. handy for that 10K linear pot ? That would save
me a lot of searching and comparing.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 110. Re: [SS-40] Tuning range

Yahoo group: SS-40
Date: 2011-06-04 20:13:51 UTC
From: Jim Kortge
Topic: 87  Message: 110

On 6/4/2011 3:37 PM, Carlo Strozzi wrote:
> On Sat, Jun 04, 2011 at 01:44:26PM -0400, Jim Kortge wrote:
>>
>> Hi Carlo,
>>
>>>
>>> I've got a 1K linear in my junk, is that value too low ?
>>
>> Yes, you really want it to be 5K and preferably, the 10K originally
>> specified.
>
> Ok, I'm about to order parts from Mouser, do you have a suitable
> Mouser part no. handy for that 10K linear pot ? That would save
> me a lot of searching and comparing.
>
> ciao,
> Carlo
>

Carlo,

This part will work FB. Mouser P/N 31JN401-F. That is a 10 K linear pot that I've used on a prototype and it works great. But, is is NOT designed for insertion into a PCB, so I didn't want to specify it for the production version of the kit. I felt that beginning builders would not be successful mounting it to the PCB and might damage the PCB. So, the audio taper pot supplied with the kits was specified so that wouldn't happen. Obviously, it there were a source of PCB mounted pots that would mount on the board at or near the same cost as the one we used, we would have used that hands down. But I could not find one from any of the normal suppliers.

With the 31JN401-F pot, you can put a 15 K resistor at the R30 location and the tuning of the SS-40 will be nearly linear across the whole tuning range.

I'm sure that is more of an answer than you anticipated, but now you know a bit of the background why the pot supplied with the kit was chosen.

72 my friend and happy building,

Jim, K8IQY

# 111. Re: [SS-40] Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 20:17:43 UTC
From: Jim Kortge
Topic: 87  Message: 111

On 6/4/2011 11:00 AM, Paul wrote:
> Thanks Terry,
>
> This was one of the "early" 5K ones vs the "later" 10K shown in the schematic.

Everyone, 5K pots will be supplied until Mouser has a stock of 10K
unit again.
>
> Mine is labelled "Alpha A5K". Google says that A5K is audio, while B5K is linear. The
volume pot is labelled A1K, which makes sense there.
>
> Other than that quirk, it's working fine, so no rush.

All of the pots in the rig are audio taper. Linear taper pots (B5K)
of that style which are PCB mountable are not available from anyone,
unfortunately.
>
> Paul - K0EET

72,

Jim, K8IQY

# 112. Re: [SS-40] Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 20:19:56 UTC
From: Jim Kortge
Topic: 87  Message: 112

On 6/4/2011 11:24 AM, Jerry AA6KI wrote:
> I finally finished my parts inventory (all accounted for!) and will start my build today. But I also received the early 5K tune pot -- should I be requesting a replacement?

The replacement would be another 5K audio taper pot. That is what is supplied with the kits until we find a better option.

What is the real-world difference between the 5K and the 10K?

None!
>
> Any comments/advice much appreciated!

Build your rig Jerry and have fun.
>
> Jerry AA6KI

72,

Jim, K8IQY

# 113. Re: [SS-40] Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 20:23:51 UTC
From: Jim Kortge
Topic: 87  Message: 113

On 6/4/2011 12:16 PM, Jerry AA6KI wrote:
> Thanks, Paul. Just checked mine -- it's an Alpha, labeled A5K.
> Happy to report that it's linear.

I'm guessing it isn't. :-)

72,

Jim, K8IQY

# 114. Manual Updates

Yahoo group: SS-40
Date: 2011-06-04 20:40:09 UTC
From: wb8icn
Topic: 114  Message: 114

Jim/Terry,

I was wondering if either of you are keeping an addendum of changes made to the manual. I think the manual is 27 pages long...so each time you announce a revised manual on the web page we would have to print it out unless we know what changes were made. If we have a on-going list of changes in a addendum list, we could just update the manual we have already printed out...unless it is some major changes and too much for ink/pen changes.

I just finished step 7, but need to add X1 per what I see in the picture. So far, no hang-ups or problems. Soldering the ground side of some components proves difficult...seems like I am heating up a lot of the PCB real estate to get the solder point warm enough to make solder flow. Flux pen has helped greatly to overcome this.

...Mikey, WB8ICN

# 115. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 20:49:16 UTC
From: Paul
Topic: 87  Message: 115

Terry,

Obviously, based on the recent discussion, don't send a replacement pot.

I'll use the audio taper pot for now and look for an e-bay deal on a nice 10-turn lin
ear.

Didn't mean to touch off such a large stream of comments over what turns out to be a
non-issue.

Thanks again for all the help.

Paul - K0EET

--- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@...> wrote:
>
> GM Paul,
>
> That would expain it. Sounds like an audio or perhaps a defective
> pot. Linears were ordered so hopefully this is an isolated case. I'll
> send you a new pot asap.
>
> Has anyone else seen this tuning rate problem?
>
> ---------------------------------------------------------------------
> I love this radio stuff !
> 72, 73 Terry, WAØITP
> wa0itp@...
> www.wa0itp.com
> www.4sqrp.com
> www.qrpspots.com
>
>

# 116. Re: Tuning range

Yahoo group: SS-40
Date: 2011-06-04 22:28:12 UTC
From: Jerry AA6KI
Topic: 87  Message: 116

Of course you're right, Jim. When I checked it, I thought I was at the mechanical mid-point, but was not. Tricky to do without a dial marker, and even trickier without a fully-caffeinated brain. :)

Jerry AA6KI

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 6/4/2011 12:16 PM, Jerry AA6KI wrote:
> > Thanks, Paul. Just checked mine -- it's an Alpha, labeled A5K.
> > Happy to report that it's linear.
>
> I'm guessing it isn't. :-)
>
> 72,
>
> Jim, K8IQY
>

# 117. Re: Manual Updates

Yahoo group: SS-40
Date: 2011-06-04 22:39:02 UTC
From: Jerry AA6KI
Topic: 114  Message: 117

Mikey,

I asked a similar question about a change list earlier. See Message #58 for Jim's reply.

73.

Jerry AA6KI

--- In SS-40@yahoogroups.com, "wb8icn" <wb8icn@...> wrote:
>
> Jim/Terry,
>
> I was wondering if either of you are keeping an addendum of changes made to the manual. I think the manual is 27 pages long...so each time you announce a revised manual on the web page we would have to print it out unless we know what changes were made. If we have a on-going list of changes in a addendum list, we could just update the manual we have already printed out...unless it is some major changes and too much for ink/pen changes.
>
> I just finished step 7, but need to add X1 per what I see in the picture. So far, no hang-ups or problems. Soldering the ground side of some components proves difficult...seems like I am heating up a lot of the PCB real estate to get the solder point warm enough to make solder flow. Flux pen has helped greatly to overcome this.
>
> ...Mikey, WB8ICN
>

# 118. Re: [SS-40] Tuning range

Yahoo group: SS-40
Date: 2011-06-04 22:50:13 UTC
From: Jim Kortge
Topic: 87  Message: 118

On 6/4/2011 4:45 PM, Carlo Strozzi wrote:
> Jim,
>
> I have another question: the parts list says MAVM108 for the varactor
> but I got one MAVM109 in the bag instead, is that OK ?
>
> tnx,
> Carlo
>

Carlo,

Essentially the same part. The MVAM108 is actually incorrect, my fault. I was thinking that was the part we were going to get from Diz, but he only has MVAM109 varicaps, which is what we buy from him.

We'll have to update the parts list to match what is going into the kits.

Thanks for bringing it to my attention.

72,

Jim, K8IQY

# 119. Re: [SS-40] Tuning range

Yahoo group: SS-40
Date: 2011-06-04 23:10:34 UTC
From: Carlo Strozzi
Topic: 87  Message: 119

On Sat, Jun 04, 2011 at 06:50:13PM -0400, Jim Kortge wrote:
> On 6/4/2011 4:45 PM, Carlo Strozzi wrote:
> >Jim,
> >
> >I have another question: the parts list says MAVM108 for the varactor
> >but I got one MAVM109 in the bag instead, is that OK ?
> >
> >tnx,
> >Carlo
> >
>
>
> Carlo,
>
> Essentially the same part. The MVAM108 is actually incorrect, my
> fault. I was thinking that was the part we were going to get from
> Diz, but he only has MVAM109 varicaps, which is what we buy from
> him.
>
> We'll have to update the parts list to match what is going into the kits.
>
> Thanks for bringing it to my attention.

That's OK. While I was waiting for you to reply I found an MVAM108 in
my junk and used that one instead :-) I've used a provisional 10K
linear pot which I happened to have, but unfortunately it is of the
center-detent type so I prefer to use a different one in the final unit,
but this one is still usefult for testing. With it, and with a 15K R30, my
VXO tunes from 16234.4 to 16259.6, with mid-range at 16249.9, so pretty
linear. I happen to have a couple of multi-turn linear pots here, one
is 3 turns and the other one is 10. The latter may be overkill so I'll
probably go for the 3-turn one. Testing the VXO, with TR2 at mid-range
I get only abt 1.6 Vpp instead of 2.5 as per the manual. I believe
a similar issue was brought up before, but not exactly at this stage
but further on in the build. I only get 2.5Vpp with TR2 fully CW,
but if you think 1.6Vpp is still enough I prefer to leave as it is.

Thanks,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 120. Re: [SS-40] Manual Updates

Yahoo group: SS-40
Date: 2011-06-04 23:11:06 UTC
From: Jim Kortge
Topic: 114  Message: 120

On 6/4/2011 4:40 PM, wb8icn wrote:
> Jim/Terry,

Hi Mike,

Missed you at breakfast this morning! :-)
>
> I was wondering if either of you are keeping an addendum of changes made to the manual.

No, but I guess I probably should have been doing that.

I think the manual is 27 pages long...so each time you announce a
revised manual on the web page we would have to print it out unless we
know what changes were made.

I'll attempt to go back and reconstruct the litany of changes. What
worries me is that I'll miss something, and that will cause another
raft of issues.

If we have a on-going list of changes in a addendum list, we could
just update the manual we have already printed out...unless it is some
major changes and too much for ink/pen changes.

Agreed, but I didn't start out that way and now it is a nasty job.
>
> I just finished step 7, but need to add X1 per what I see in the picture.

That's in one of the later update! :-)

So far, no hang-ups or problems. Soldering the ground side of some
components proves difficult...seems like I am heating up a lot of the
PCB real estate to get the solder point warm enough to make solder flow.

You need a soldering iron with more wattage. A 40-watt unit works well.

Flux pen has helped greatly to overcome this.

A flux pen always helps, regardless of the joint. Not enough flux in
these modern solders; they need more to better wet and flow.
>
> ...Mikey, WB8ICN

Thanks for your comments Mike and happy building.

72,

Jim, K8IQY

# 121. Re: [SS-40] Tuning range

Yahoo group: SS-40
Date: 2011-06-04 23:16:44 UTC
From: Jim Kortge
Topic: 87  Message: 121

On 6/4/2011 7:10 PM, Carlo Strozzi wrote:
> On Sat, Jun 04, 2011 at 06:50:13PM -0400, Jim Kortge wrote:
>> On 6/4/2011 4:45 PM, Carlo Strozzi wrote:
>>> Jim,
>>>
>>> I have another question: the parts list says MAVM108 for the varactor
>>> but I got one MAVM109 in the bag instead, is that OK ?
>>>
>>> tnx,
>>> Carlo
>>>
>>
>>
>> Carlo,
>>
>> Essentially the same part. The MVAM108 is actually incorrect, my
>> fault. I was thinking that was the part we were going to get from
>> Diz, but he only has MVAM109 varicaps, which is what we buy from
>> him.
>>
>> We'll have to update the parts list to match what is going into the kits.
>>
>> Thanks for bringing it to my attention.
>
> That's OK. While I was waiting for you to reply I found an MVAM108 in
> my junk and used that one instead :-) I've used a provisional 10K
> linear pot which I happened to have, but unfortunately it is of the
> center-detent type so I prefer to use a different one in the final unit,
> but this one is still usefult for testing. With it, and with a 15K R30, my
> VXO tunes from 16234.4 to 16259.6, with mid-range at 16249.9, so pretty
> linear. I happen to have a couple of multi-turn linear pots here, one
> is 3 turns and the other one is 10. The latter may be overkill so I'll
> probably go for the 3-turn one. Testing the VXO, with TR2 at mid-range
> I get only abt 1.6 Vpp instead of 2.5 as per the manual. I believe
> a similar issue was brought up before, but not exactly at this stage
> but further on in the build. I only get 2.5Vpp with TR2 fully CW,
> but if you think 1.6Vpp is still enough I prefer to leave as it is.
>
> Thanks,
> Carlo
>

Carlo,

Either a MVAM108 or MVAM109 will work FB as the tuning element. I've tried both!

I'm glad that you can confirm what I found using a 10K linear pot and R30 at 15K, it seems to be about optimal.

The 1.6 volt p-p is most likely fine. Those signal levels change depending on where the VXO is tuned until you get to the final stage, where a most, if not all, of the variability goes away. So if it were me, I'd continue building and having fun.

72 and have a good weekend,

Jim, K8IQY

# 122. Re: Manual Updates

Yahoo group: SS-40
Date: 2011-06-05 01:47:31 UTC
From: wb8icn
Topic: 114  Message: 122

Thanks Jerry!

--- In SS-40@yahoogroups.com, "Jerry AA6KI" <jpalsson@...> wrote:
>
> Mikey,
>
> I asked a similar question about a change list earlier. See Message #58 for Jim's reply.
>
> 73.
>
> Jerry AA6KI
>
> --- In SS-40@yahoogroups.com, "wb8icn" <wb8icn@> wrote:
> >
> > Jim/Terry,
> >
> > I was wondering if either of you are keeping an addendum of changes made to the manual. I think the manual is 27 pages long...so each time you announce a revised manual on the web page we would have to print it out unless we know what changes were made. If we have a on-going list of changes in a addendum list, we could just update the manual we have already printed out...unless it is some major changes and too much for ink/pen changes.
> >
> > I just finished step 7, but need to add X1 per what I see in the picture. So far, no hang-ups or problems. Soldering the ground side of some components proves difficult...seems like I am heating up a lot of the PCB real estate to get the solder point warm enough to make solder flow. Flux pen has helped greatly to overcome this.
> >
> > ...Mikey, WB8ICN
> >
>

# 123. Re: Manual Updates

Yahoo group: SS-40
Date: 2011-06-05 01:50:56 UTC
From: wb8icn
Topic: 114  Message: 123

Well, start now and maybe some of us can also chip in and send changes to you/Terry and update as we go.

Just an idea...might save some troubleshooting issues later on for future builders who have already downloaded the doc's and don't think to look for updates as they start building.

Sorry about missing breakfast...just took the grand daughter back home and it felt great to sleep in!!!

...Mikey

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 6/4/2011 4:40 PM, wb8icn wrote:
> > Jim/Terry,
>
> Hi Mike,
>
> Missed you at breakfast this morning! :-)
> >
> > I was wondering if either of you are keeping an addendum of changes made to the manual.
>
> No, but I guess I probably should have been doing that.
>
> I think the manual is 27 pages long...so each time you announce a
> revised manual on the web page we would have to print it out unless we
> know what changes were made.
>
> I'll attempt to go back and reconstruct the litany of changes. What
> worries me is that I'll miss something, and that will cause another
> raft of issues.
>
> If we have a on-going list of changes in a addendum list, we could
> just update the manual we have already printed out...unless it is some
> major changes and too much for ink/pen changes.
>
> Agreed, but I didn't start out that way and now it is a nasty job.
> >
> > I just finished step 7, but need to add X1 per what I see in the picture.
>
> That's in one of the later update! :-)
>
> So far, no hang-ups or problems. Soldering the ground side of some
> components proves difficult...seems like I am heating up a lot of the
> PCB real estate to get the solder point warm enough to make solder flow.
>

> You need a soldering iron with more wattage. A 40-watt unit works well.
>
> Flux pen has helped greatly to overcome this.
>
> A flux pen always helps, regardless of the joint. Not enough flux in
> these modern solders; they need more to better wet and flow.
> >
> > ...Mikey, WB8ICN
>
> Thanks for your comments Mike and happy building.
>
> 72,
>
> Jim, K8IQY
>

# 124. On the Air with the trio

Yahoo group: SS-40
Date: 2011-06-05 02:26:37 UTC
From: huyettm
Topic: 124  Message: 124

I finished the packaging for my three kits today, the NS-40 which I have had quite a while, the MagicBox which I've had about a year and the SS-40 which I just completed this week. Everything seems to work as expected. I have to say it takes a lot of coax jumpers and audio patch cords to hook it all up.

One little thing I found is that in order to find your transmit frequency you have to disconnect the speaker from the MagicBox as it puts out the audio side tone. But if you plug the speaker into the SS-40 you can then find the transmit frequency.

Haven't had a qso as there is a contest or something going on tonight but I get 8 watts out and the receiver is very sensitive. So I am sure I will not have any problem.

I built the cases from scratch. they are roughly 4-1/2 by 5-1/2 by 1-1/4. I used the sheet metal from an old dishwasher to build them. Even my wife things they are cute! I'll post a photo.

Thanks 40-States and all who contribute for some really fun and functional kits.

Martin K0BXB

# 125. Step 10 - VXO Measurement

Yahoo group: SS-40
Date: 2011-06-05 03:51:12 UTC
From: wb8icn
Topic: 125  Message: 125

I am getting the good freq swing ( 16.2352 to 16.2577Mhz ), but only seeing 0.7v p-p ( -3.5dBm ). Use a X1 probe, 1M input. TR2 is about midway in its rotation.

The manual says 2.5v p-p, so I suspect something is not working correctly.

Anyone else run across this yet?

...Mikey, WB8ICN

# 126. Re: [SS-40] Tuning range

Yahoo group: SS-40
Date: 2011-06-05 07:23:54 UTC
From: Carlo Strozzi
Topic: 87  Message: 126

On Sat, Jun 04, 2011 at 07:16:44PM -0400, Jim Kortge wrote:
> On 6/4/2011 7:10 PM, Carlo Strozzi wrote:
(...)
> >probably go for the 3-turn one. Testing the VXO, with TR2 at mid-range
> >I get only abt 1.6 Vpp instead of 2.5 as per the manual. I believe
> >a similar issue was brought up before, but not exactly at this stage
> >but further on in the build. I only get 2.5Vpp with TR2 fully CW,
> >but if you think 1.6Vpp is still enough I prefer to leave as it is.

Jim,

silly me! My old scope cuts off at 15 MHz! It was past 1:00 AM when I
did the test so I must be less than awake. Now I've tested again with
an RF probe and I'm seeing more than 3Vpp with TR2 at mid range :-)

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 127. Re: [SS-40] Step 10 - VXO Measurement

Yahoo group: SS-40
Date: 2011-06-05 14:33:15 UTC
From: Jim Kortge
Topic: 125  Message: 127

On 6/4/2011 11:51 PM, wb8icn wrote:
> I am getting the good freq swing ( 16.2352 to 16.2577Mhz ), but only seeing 0.7v p-p ( -3.5dBm ). Use a X1 probe, 1M input. TR2 is about midway in its rotation.

Try setting the frequency control pot (VR2) fully clockwise and
remeasure. The signal changes amplitude as VR2 is rotated CCW.
>
> The manual says 2.5v p-p, so I suspect something is not working correctly.

I'm guessing it is fine. That oscillator circuit is bombproof.
>
> Anyone else run across this yet?

They probably did if VR2 isn't fully CW. Maybe I need to add that
into the manual too. Comments anyone?
>
> ...Mikey, WB8ICN

Thanks Mike; lest us know what you find.

72,

Jim, K8IQY

# 128. Re: [SS-40] On the Air with the trio

Yahoo group: SS-40
Date: 2011-06-05 15:08:49 UTC
From: Jim Kortge
Topic: 124  Message: 128

On 6/4/2011 10:26 PM, huyettm wrote:
> I finished the packaging for my three kits today, the NS-40 which I have had quite a while, the MagicBox which I've had about a year and the SS-40 which I just completed this week. Everything seems to work as expected. I have to say it takes a lot of coax jumpers and audio patch cords to hook it all up.

Essentially a coax and an audio or keyline cable from device to the MagicBox to make it work.

>
> One little thing I found is that in order to find your transmit frequency you have to disconnect the speaker from the MagicBox as it puts out the audio side tone. But if you plug the speaker into the SS-40 you can then find the transmit frequency.

You can keep the receiver and speaker connected to the MagicBox and still hear your transmit signal in the receiver in the "SPOT" mode, but I'm guessing for your setup, R46, the 10 Meg resistor in the MagicBox is way too large to let enough receive audio through so you can hear it. Try paralleling R46 with a smaller resistor (10-100 Ohms) until you find the value that lets the right amount of audio through while spotting your transmit frequency. The intent for the spotting mode was to be able to do that.
>
> Haven't had a qso as there is a contest or something going on tonight but I get 8 watts out

Those NS-40s really cook!

and the receiver is very sensitive. So I am sure I will not have any problem.

I'm hoping you won't.
>
> I built the cases from scratch.

Cool.....

they are roughly 4-1/2 by 5-1/2 by 1-1/4. I used the sheet metal from an old dishwasher to build them. Even my wife things they are cute! I'll post a photo.
>
> Thanks 40-States and all who contribute for some really fun and functional kits.

We are glad you like the trio! :-)

>
> Martin K0BXB

72 Martin and thanks for the report,

Jim, K8IQY

# 129. Re: [SS-40] I'm done, works well

Yahoo group: SS-40
Date: 2011-06-05 16:54:14 UTC
From: Carlo Strozzi
Topic: 129  Message: 129

Done!

Another SS-40 on the air :-) It sounds nice. Mine covers 7019.4-7044.6, almost linear over the whole range. That's with a 10K linear tuning pot and 15K R30, as suggested by Jim.

Next on to a nice enclosure! I'll use the same one that I used also for the NS-40 and the MagicBox, which fits perfectly. Unfortunately it's a no-name, I'm buying them online from an Italian store and I think they are better than Ten-Tec TP-41. Here's what my MagicBox and NS-40 look like in those enclosures:

http://www.strozzi.it/users/carlo/hamradio/magicbox/epsn4832.html
http://www.strozzi.it/users/carlo/hamradio/ns-40/epsn4868.html

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 130. Tuning Range Only getting 17.43 khz

Yahoo group: SS-40
Date: 2011-06-06 00:49:25 UTC
From: John
Topic: 130  Message: 130

I guess I also have one of the early kits as I have the 5K VR2 and I am only getting 17.43 khz.of tuning range. I thought maybe setting TR2 might effect the range so I tried that but it only moved the top and bottom freqs up and down a little.

I also seem to be missing a 1000 uH choke.

Can I get on the list for a replsacement pot and maybe an additional 1000 uH choke???

I have been enjoying the build.

72/73 John NS5Z

# 131. Re: Tuning Range Only getting 17.43 khz

Yahoo group: SS-40
Date: 2011-06-06 01:04:59 UTC
From: Paul
Topic: 130  Message: 131

Did you ground the vxo crystal cases? (see msg #85)

The 5k pot will give you full range.

--- In SS-40@yahoogroups.com, "John" <john@...> wrote:
>
> I guess I also have one of the early kits as I have the 5K VR2 and I am only getting 17.43 khz.of tuning range. I thought maybe setting TR2 might effect the range so I tried that but it only moved the top and bottom freqs up and down a little.
>
> I also seem to be missing a 1000 uH choke.
>
> Can I get on the list for a replsacement pot and maybe an additional 1000 uH choke???
>
> I have been enjoying the build.
>
> 72/73 John NS5Z
>

# 132. VXO Measurement

Yahoo group: SS-40
Date: 2011-06-06 03:09:13 UTC
From: wb8icn
Topic: 132  Message: 132

Jim (and all),

Just finished step 11 and listen to several CW QSOs with a make-shift lash-up of antenna. Glad to hear so many signals!

During step 10, I measured 32dB separation of carrier and first harmonic, but the signal level does not meet the manual spec's. I have about 4v p-p on pad 6 of the mixer with TR2 fully CW. When turning CCW, the signal drops out. I measured this drop out from C48 and it was about 0.9v p-p. The point of reporting all of this is to affirm that even though the measurements were not quite what the manual called for, the receiver still works quite well...and the front end components have yet to be added.

I hope to finish it by tomorrow night if all goes well and I get all my "Honey To-Do" chores done as planned.

Thanks to Jim and 4-SQRP for another fine build!

72/73...Mikey, WB8ICN
P.S. Whoever invented non-heat strip-able magnetic wire ought to be shot!

# 133. First QSO

Yahoo group: SS-40
Date: 2011-06-06 03:25:01 UTC
From: huyettm
Topic: 133  Message: 133

Just had my first QSO using the combination of the NS-40, SS-40 and MagicBox. Worked flawlessly. Got a 579 report, gave a 589 report. What a nice, smooth, easy to operate setup. Thanks again, Jim and everyone at Four State involved with these nifty rigs!

73, Martin K0BXB

# 134. Re: Tuning Range Only getting 17.43 khz

Yahoo group: SS-40
Date: 2011-06-06 06:40:58 UTC
From: John
Topic: 130  Message: 134

Yes, I ground3d the crystal cases per the instructions.

--- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@...> wrote:
>
>
> Did you ground the vxo crystal cases? (see msg #85)
>
> The 5k pot will give you full range.
>
>
>
>
> --- In SS-40@yahoogroups.com, "John" <john@> wrote:
> >
> > I guess I also have one of the early kits as I have the 5K VR2 and I am only getting 17.43 khz.of tuning range. I thought maybe setting TR2 might effect the range so I tried that but it only moved the top and bottom freqs up and down a little.
> >
> > I also seem to be missing a 1000 uH choke.
> >
> > Can I get on the list for a replsacement pot and maybe an additional 1000 uH choke???
> >
> > I have been enjoying the build.
> >
> > 72/73 John NS5Z
> >
>

# 135. Re: [SS-40] First QSO

Yahoo group: SS-40
Date: 2011-06-06 13:24:53 UTC
From: WA0ITP
Topic: 133  Message: 135

Excellent Martin,

Congratulaions!
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "huyettm" <mehhuyett@...>
To: <SS-40@yahoogroups.com>
Sent: Sunday, June 05, 2011 10:25 PM
Subject: [SS-40] First QSO

| Just had my first QSO using the combination of the NS-40, SS-40 and
MagicBox. Worked flawlessly. Got a 579 report, gave a 589 report. What
a nice, smooth, easy to operate setup. Thanks again, Jim and everyone
at Four State involved with these nifty rigs!
|
| 73, Martin K0BXB
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 136. Re: [SS-40] Re: Tuning Range Only getting 17.43 khz

Yahoo group: SS-40
Date: 2011-06-06 13:25:40 UTC
From: Jim Kortge
Topic: 130 Message: 136

On 6/6/2011 2:40 AM, John wrote:
> Yes, I ground3d the crystal cases per the instructions.
>
> --- In SS-40@yahoogroups.com, "Paul"<paul.d.rose@...> wrote:
>>
>>
>> Did you ground the vxo crystal cases? (see msg #85)
>>
>> The 5k pot will give you full range.
>>
>>
>>
>>
>> --- In SS-40@yahoogroups.com, "John"<john@> wrote:
>>>
>>> I guess I also have one of the early kits as I have the 5K VR2 and I am only getting 17.43 khz.of tuning range. I thought maybe setting TR2 might effect the range so I tried that but it only moved the top and bottom freqs up and down a little.
>>>
>>> I also seem to be missing a 1000 uH choke.
>>>
>>> Can I get on the list for a replsacement pot and maybe an additional 1000 uH choke???
>>>
>>> I have been enjoying the build.
>>>
>>> 72/73 John NS5Z
>>>
>>

John,

Would you try resoldering the crystal ground connection and see if that makes any difference. If not, could you send me a photo or two of the VXO section showing from VR2 through Q7 so I can look at what parts are there.

72 and thanks; sorry the span isn't what it should be,

Jim, K8IQY

PS...the VR2 5K pot isn't the issue. It is something else. Could be one of the crystals is kaput or not soldered.

# 137. Tuning Knob

Yahoo group: SS-40
Date: 2011-06-06 17:24:04 UTC
From: WA0ITP
Topic: 137  Message: 137

I've been asked about suitable knobs for the SS-40. A good tuning knob would be Radio Shack's #274-402 communications style knob, it's about 1.5" in dia. and should provide a nice tuning rate.
http://www.radioshack.com/product/index.jsp?productId=2102829

Mouser has some nice knobs also, such as those provided in the 2N2xx kits. The Mouser numbers for those are 450-2039-GRX and 450-2035-GRX

Hope this helps.
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

# 138. SS-40 on the Air

Yahoo group: SS-40
Date: 2011-06-08 04:28:34 UTC
From: wb8icn
Topic: 138  Message: 138

Just finished up my SS-40. Despite some concerns regarding the signal level of the VXO output...this receiver really rocks!

Listening to a Q right now with an old small speaker...sounds really good. Depending on how hot you make the VXO signal (using TR2) will depend how well the receiver sounds. I can actually overwhelm signals is the VXO signal is too hot.

Jim, Terry...thanks for a really neat receiver project!!!

72/73...Mikey, WB8ICN

# 139. Re: [SS-40] SS-40 on the Air

Yahoo group: SS-40
Date: 2011-06-08 12:08:14 UTC
From: Jim Kortge
Topic: 138  Message: 139

On 6/8/2011 12:28 AM, wb8icn wrote:
> Just finished up my SS-40. Despite some concerns regarding the signal level of the VXO output...this receiver really rocks!

Mike,

Thanks for the report and nice comments.

>
> Listening to a Q right now with an old small speaker...sounds really good. Depending on how hot you make the VXO signal (using TR2) will depend how well the receiver sounds. I can actually overwhelm signals is the VXO signal is too hot.

I[m guessing that you don't have TR1 and TR2 adjusted quite right.
The drive level to the mixer ought to be set with TR2 at least 1/2
open and maybe a bit more to drive the mixer into saturation. Once it
is there, then TR1, the audio AGC pot needs to be turned up enough so
that strong signals are not distorted. That will be near mid-point
also, but not quite. You have to play around with the adjustment of
TR1 to find the sweet spot where strong signals don't have a slight
thump at the beginning of a CW character, but not too far up to shut
down the front-end too much. Your ears are the best tool for setting
TR1 properly.
>
> Jim, Terry...thanks for a really neat receiver project!!!

Sure glad you like it Mike. There will be more projects coming down
the pike after we take a bit of a rest for the design team (me). :-)
>
> 72/73...Mikey, WB8ICN

72,

Jim, K8IQY

# 140. "Spot" Mode

Yahoo group: SS-40
Date: 2011-06-08 12:42:37 UTC
From: Martin / K0BXB
Topic: 124  Message: 140

Hi Jim,

I can’t seem to find any reference to a “spot” mode and how to use it in the documentation for the MagicBox. Can you point me to that?

Thanks,

Martin

You can keep the receiver and speaker connected to the MagicBox and still hear your transmit signal in the receiver in the "SPOT" mode, but I'm guessing for your setup, R46, the 10 Meg resistor in the MagicBox is way too large to let enough receive audio through so you can hear it. Try paralleling R46 with a smaller resistor (10-100 Ohms) until you find the value that lets the right amount of audio through while spotting your transmit frequency. The intent for the spotting mode was to be able to do that.

# 141. Re: [SS-40] "Spot" Mode

Yahoo group: SS-40
Date: 2011-06-08 13:32:59 UTC
From: Ira B. Rothenhoefer
Topic: 124  Message: 141

Hi;

There is some references to the spot function in the magic box
packaging considerations PDF. I stopped looking when I found that...

73

Barney

==========

On 6/8/2011 7:42 AM, Martin / K0BXB wrote:
> Hi Jim,
> I can?t seem to find any reference to a ?spot? mode and how to use it in
> the documentation for the MagicBox. Can you point me to that?
> Thanks,
> Martin
>
> You can keep the receiver and speaker connected to the MagicBox and
> still hear your transmit signal in the receiver in the "SPOT" mode,
> but I'm guessing for your setup, R46, the 10 Meg resistor in the
> MagicBox is way too large to let enough receive audio through so you
> can hear it. Try paralleling R46 with a smaller resistor (10-100
> Ohms) until you find the value that lets the right amount of audio
> through while spotting your transmit frequency. The intent for the
> spotting mode was to be able to do that.
>

# 142. Emailing: mb1r2bschpg2.gif

Yahoo group: SS-40
Date: 2011-06-08 13:37:41 UTC
From: Ira B. Rothenhoefer
Topic: 142  Message: 142
Attachments: 1 described; binary payloads are missing from this source WARC

also in this schematic..
Barney

The message is ready to be sent with the following file or link attachments:

mb1r2bschpg2.gif

Note: To protect against computer viruses, e-mail programs may prevent
sending or receiving certain types of file attachments. Check your
e-mail security settings to determine how attachments are handled.

# 143. Re: [SS-40] "Spot" Mode

Yahoo group: SS-40
Date: 2011-06-08 13:36:08 UTC
From: Jim Kortge
Topic: 124  Message: 143
Attachments: 1 described; binary payloads are missing from this source WARC

On 6/8/2011 8:42 AM, Martin / K0BXB wrote:
> Hi Jim,

Hi Martin,

>
> I can’t seem to find any reference to a “spot” mode and how to use it in the documentation for the MagicBox.

It is at the end of the documentation, in the "Packaging Section" information. I just updated that area as there were some typos that might be confusing.

Can you point me to that?

I'm attaching that version to this reply. If it still isn't enough information, we can talk more.
>
> Thanks,

You are welcome Martin.
>
> Martin

72,

Jim, K8IQY
>
>
> You can keep the receiver and speaker connected to the MagicBox and
> still hear your transmit signal in the receiver in the "SPOT" mode,
> but I'm guessing for your setup, R46, the 10 Meg resistor in the
> MagicBox is way too large to let enough receive audio through so you
> can hear it. Try paralleling R46 with a smaller resistor (10-100
> Ohms) until you find the value that lets the right amount of audio
> through while spotting your transmit frequency. The intent for the
> spotting mode was to be able to do that.
>

# 144. Re: [SS-40] "Spot" Mode

Yahoo group: SS-40
Date: 2011-06-08 14:55:14 UTC
From: Martin / K0BXB
Topic: 124  Message: 144

Got it. Thanks. Sorry to bother you.

Martin

From: Jim Kortge
Sent: Wednesday, June 08, 2011 8:36 AM
To: SS-40@yahoogroups.com
Cc: Martin / K0BXB
Subject: Re: [SS-40] "Spot" Mode

On 6/8/2011 8:42 AM, Martin / K0BXB wrote:
> Hi Jim,

Hi Martin,

>
> I canâ€™t seem to find any reference to a â€œspotâ€? mode and how to use it in the documentation for the MagicBox.

It is at the end of the documentation, in the "Packaging Section" information. I just updated that area as there were some typos that might be confusing.

Can you point me to that?

I'm attaching that version to this reply. If it still isn't enough information, we can talk more.
>
> Thanks,

You are welcome Martin.
>
> Martin

72,

Jim, K8IQY
>
>
> You can keep the receiver and speaker connected to the MagicBox and
> still hear your transmit signal in the receiver in the "SPOT" mode,
> but I'm guessing for your setup, R46, the 10 Meg resistor in the
> MagicBox is way too large to let enough receive audio through so you
> can hear it. Try paralleling R46 with a smaller resistor (10-100
> Ohms) until you find the value that lets the right amount of audio
> through while spotting your transmit frequency. The intent for the
> spotting mode was to be able to do that.
>

# 145. Re: [SS-40] "Spot" Mode

Yahoo group: SS-40
Date: 2011-06-08 15:00:57 UTC
From: Jim Kortge
Topic: 124  Message: 145

On 6/8/2011 10:55 AM, Martin / K0BXB wrote:
> Got it. Thanks. Sorry to bother you.
>
> Martin

Martin,

Not a bother; happy to help out as no one should know more about the design than does the designer! :-)

72,

Jim, K8IQY

# 146. missing resistor in "Continuing the VXO build" section

Yahoo group: SS-40
Date: 2011-06-09 02:02:06 UTC
From: O. Alan Jones
Topic: 146  Message: 146

R31 - 10K resistor is missing in my kit. I have a carbon 10k resistor I can slap in the circuit for now. What do you say Jim?

Alan,
N8WQ

# 147. Re: [SS-40] missing resistor in "Continuing the VXO build" section

Yahoo group: SS-40
Date: 2011-06-09 13:38:16 UTC
From: Jim Kortge
Topic: 146  Message: 147

On 6/8/2011 10:02 PM, O. Alan Jones wrote:
> R31 - 10K resistor is missing in my kit. I have a carbon 10k resistor I
> can slap in the circuit for now. What do you say Jim?

It will work fine Alan. It is used in a non-critical area of the circuitry.

Build on.....

>
> Alan,
> N8WQ
>
>

72,

Jim, K8IQY

# 148. VXO - first test stage

Yahoo group: SS-40
Date: 2011-06-09 18:14:02 UTC
From: Jerry AA6KI
Topic: 148  Message: 148

I've reached the first test stage of Step 10, the VXO, and I am encountering low readings:

RF probe: 0.6 volts
Scope: Approximately 1.65 volts p-p (nice waveform, though)
Frequency counter: 21 KHz tuning range (16.235-16.256 MHz)

Crystals are grounded, by the way.

I know others have reported low readings, but mine seem worse. Any advice or tips much appreciated! I've stopped at this point and await your wisdom. :)

Jerry AA6KI

# 149. Re: VXO - first test stage

Yahoo group: SS-40
Date: 2011-06-09 18:49:20 UTC
From: Jerry AA6KI
Topic: 148  Message: 149

Just double-checked: VR2 wasn't *fully* clockwise. But improvements were slight: RF probe now shows .68 volts; scope shows 1.8 volts p-p.

--- In SS-40@yahoogroups.com, "Jerry AA6KI" <jpalsson@...> wrote:
>
> I've reached the first test stage of Step 10, the VXO, and I am encountering low readings:
>
> RF probe: 0.6 volts
> Scope: Approximately 1.65 volts p-p (nice waveform, though)
> Frequency counter: 21 KHz tuning range (16.235-16.256 MHz)
>
> Crystals are grounded, by the way.
>
> I know others have reported low readings, but mine seem worse. Any advice or tips much appreciated! I've stopped at this point and await your wisdom. :)
>
> Jerry AA6KI
>

# 150. Re: [SS-40] VXO - first test stage

Yahoo group: SS-40
Date: 2011-06-09 22:38:53 UTC
From: Jim Kortge
Topic: 148  Message: 150

On 6/9/2011 2:14 PM, Jerry AA6KI wrote:
> I've reached the first test stage of Step 10, the VXO, and I am encountering low readings:
>
> RF probe: 0.6 volts
> Scope: Approximately 1.65 volts p-p (nice waveform, though)
> Frequency counter: 21 KHz tuning range (16.235-16.256 MHz)
>
> Crystals are grounded, by the way.
>
> I know others have reported low readings, but mine seem worse. Any advice or tips much appreciated! I've stopped at this point and await your wisdom. :)
>
> Jerry AA6KI

Jerry,

Ignore the low readings and keep building. I think it will all turn out OK. If not, we will have learned something and I can always take you receiver and figure out why it isn't right.

72,

Jim, K8IQY

# 151. Re: VXO - first test stage

Yahoo group: SS-40
Date: 2011-06-09 22:54:01 UTC
From: Jerry AA6KI
Topic: 148  Message: 151

OK, Jim -- much appreciated! I'm building slowly, since I can only manage an hour or so daily at the bench. But onward I go ...

72,

Jerry AA6KI

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 6/9/2011 2:14 PM, Jerry AA6KI wrote:
> > I've reached the first test stage of Step 10, the VXO, and I am encountering low readings:
> >
> > RF probe: 0.6 volts
> > Scope: Approximately 1.65 volts p-p (nice waveform, though)
> > Frequency counter: 21 KHz tuning range (16.235-16.256 MHz)
> >
> > Crystals are grounded, by the way.
> >
> > I know others have reported low readings, but mine seem worse. Any advice or tips much appreciated! I've stopped at this point and await your wisdom. :)
> >
> > Jerry AA6KI
>
> Jerry,
>
> Ignore the low readings and keep building. I think it will all turn
> out OK. If not, we will have learned something and I can always take
> you receiver and figure out why it isn't right.
>
> 72,
>
> Jim, K8IQY
>

# 152. SS-40 enclosures TPA-41

Yahoo group: SS-40
Date: 2011-06-10 12:51:33 UTC
From: bill_nt9k
Topic: 152  Message: 152

I just got a call from Ten Tec, I ordered 2 TPA-41's and they only had one. He said it would be at least a month before they make up anymore. So, if you need one, you will either have to go with the black or gray models or wait. Bummer! I guess I'll use the one they are sending me for the SS-40 and wait for the other one to package my NS-40? It's been without an enclosure for a long time anyway, but I sure was hoping to get my trio all packaged up now. He was real nice on the phone and said he would give me free shipping on the backorder. Anyway, I just thought I would pass this along to the group FYI.
73, Bill NT9K..
http://www.nt9k.com

# 153. Another SS-40 built

Yahoo group: SS-40
Date: 2011-06-10 13:31:09 UTC
From: Virgil R.
Topic: 153  Message: 153

Just finished a SS-40 receiver and put it online, other than my boo boo of wiring T1 in wrong everything else was fine. Had to replace IC SA612 due to error, with Dennis KC0IFQ help we corrected the problem and what a fine receiver. Jim K8IQY you're to be congfatulated on nice piece of equipment. Dick, N0TGR

# 154. Re: [SS-40] Another SS-40 built

Yahoo group: SS-40
Date: 2011-06-10 13:32:33 UTC
From: WA0ITP
Topic: 153  Message: 154

Excellent Dick, congratulations.
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Virgil R." <n0tgr@...>
To: <SS-40@yahoogroups.com>
Sent: Friday, June 10, 2011 8:31 AM
Subject: [SS-40] Another SS-40 built

| Just finished a SS-40 receiver and put it online, other than my boo
boo of wiring T1 in wrong everything else was fine. Had to replace IC
SA612 due to error, with Dennis KC0IFQ help we corrected the problem
and what a fine receiver. Jim K8IQY you're to be congfatulated on nice
piece of equipment. Dick, N0TGR
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 155. Pics

Yahoo group: SS-40
Date: 2011-06-10 14:32:33 UTC
From: Mike
Topic: 155  Message: 155

I see a lot of completions of the SS-40, any body have pics of their trios NS40,MB,and SS-40's I know we would like to see some.

# 156. Re: [SS-40] Another SS-40 built

Yahoo group: SS-40
Date: 2011-06-10 16:16:53 UTC
From: Jim Kortge
Topic: 153  Message: 156

On 6/10/2011 9:31 AM, Virgil R. wrote:
> Just finished a SS-40 receiver and put it online, other than my boo boo of wiring T1 in wrong everything else was fine. Had to replace IC SA612 due to error, with Dennis KC0IFQ help we corrected the problem and what a fine receiver. Jim K8IQY you're to be congfatulated on nice piece of equipment. Dick, N0TGR
>

Dick,

Nice to hear another SS-40 is up and running.

I just repaired one this morning for a list member whose rig had issues that he could not find. Turns out that two critical capacitors were swapped turning the LT1253 into a ferocious oscillator instead of a well behaved dual amplifier. I only mention all of this as a gentle reminder that this receiver is pretty much bomb proof; if it isn't working correctly, chances are there are parts either not soldered or in the wrong location. A second set of eyes looking at the PCB and the schematic can usually find these, as well as looking at the PCB and the photos in the Assembly Manual.

72,

Jim, K8IQY

# 157. Re: [SS-40] Pics

Yahoo group: SS-40
Date: 2011-06-10 17:07:46 UTC
From: Martin / K0BXB
Topic: 155  Message: 157

Hi Mike,

I put a photo of my trio in the photos section of this group. Take a look.

Martin K0BXB

From: Mike
Sent: Friday, June 10, 2011 9:32 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] Pics

I see a lot of completions of the SS-40, any body have pics of their trios NS40,MB,and SS-40's I know we would like to see some.

# 158. SS-40 and Magic Box

Yahoo group: SS-40
Date: 2011-06-10 20:31:07 UTC
From: john@all-the-facts.com
Topic: 158  Message: 158

Does the magic box control power to the transmitter and reciever via its on/off switch?

I also assume that with the MB that you can use the same power source?

72/73, John NS5Z

Bossier City, Louisiana
EM-32, QRP-ARCI, G-QRP, ARRL, RSGB

# 159. Re: [SS-40] SS-40 and Magic Box

Yahoo group: SS-40
Date: 2011-06-10 21:17:13 UTC
From: Jim Kortge
Topic: 158  Message: 159

On 6/10/2011 4:31 PM, john@... wrote:
>
> Does the magic box control power to the transmitter and reciever via its on/off switch?

No, not as designed. The MagicBox power switch only controls the
power to the MagicBox.
>
> I also assume that with the MB that you can use the same power source?

Yes you can. It will run off of any of the commonly used power
sources, but probably works best off of a good, stiff 13.8 volt supply
with sufficient amperage to handle all of the devices it is powering.
>
>
> 72/73, John NS5Z

72 John, good questions you asked,

Jim, K8IQY

# 160. winding transformer T1

Yahoo group: SS-40
Date: 2011-06-11 02:22:24 UTC
From: O. Alan Jones
Topic: 160  Message: 160

Good Evening Folks,
I have a question about winding transformer T1.
After winding the transformer with the first piece of 6" wire should I have 4 turns visible on one side and 3 turns visible on the side that both wires come out?

Alan
N8WQ

# 161. Pre-Mixer Sanity Check

Yahoo group: SS-40
Date: 2011-06-11 02:58:57 UTC
From: Jerry AA6KI
Topic: 161  Message: 161

Jim, I've finished the VXO stage, but I'm still getting very low drive. Watching my scope while rotating TR2, I see a range from several millivolts to about 1.5V P-P. I'm measuring it at mixer pad 6, which I take to be the one across from pad 1 (dotted).

I'm quite sure I have all the components placed correctly. Should I follow your previous advice and carry on with the mixer installation, or is there a particular area I should troubleshoot first (reflow solder connections, etc.)?

Many thanks.

Jerry AA6KI

# 162. Re: winding transformer T1

Yahoo group: SS-40
Date: 2011-06-11 03:11:40 UTC
From: Paul
Topic: 160  Message: 162

Yep!

It's the trip through both holes that counts as a "turn".

Paul - K0EET

--- In SS-40@yahoogroups.com, "O. Alan Jones" <oalanjones@...> wrote:
>
> Good Evening Folks,
> I have a question about winding transformer T1.
> After winding the transformer with the first piece of 6" wire should I
> have 4 turns visible on one side and 3 turns visible on the side that
> both wires come out?
>
> Alan
> N8WQ
>

# 163. Re: [SS-40] winding transformer T1

Yahoo group: SS-40
Date: 2011-06-11 13:17:51 UTC
From: Jim Kortge
Topic: 160  Message: 163

On 6/10/2011 10:22 PM, O. Alan Jones wrote:
> Good Evening Folks,

Greetings Alan,

> I have a question about winding transformer T1.
> After winding the transformer with the first piece of 6" wire should I
> have 4 turns visible on one side and 3 turns visible on the side that
> both wires come out?

Yes, that's exactly what you should have. The visible 4-turns will be
on the side opposite the side where the wires ends are. Then you turn
the core around and repeat the whole process. Harder to see the turns
though at that point. I thought I made all of that clear in the
Assembly Manual, but maybe not since you have a question about it.
>
> Alan
> N8WQ

72,

Jim, K8IQY

# 164. Re: [SS-40] Pre-Mixer Sanity Check

Yahoo group: SS-40
Date: 2011-06-11 13:48:35 UTC
From: Jim Kortge
Topic: 161  Message: 164

On 6/10/2011 10:58 PM, Jerry AA6KI wrote:
> Jim, I've finished the VXO stage, but I'm still getting very low drive. Watching my scope while rotating TR2, I see a range from several millivolts to about 1.5V P-P.

The 1.5 volts p-p is a bit low, but its the several millivolts that has me worried. Make sure that TR2, to tuning pot is fully CW when doing the measurements and see if that changes anything. Also, confirm that trimmer pot TR2 is the 1K unit, not the 10K unit that is supposed to be used in the Audio Amp.

I'm measuring it at mixer pad 6, which I take to be the one across from pad 1 (dotted).

Yep, that's the correct location.
>
> I'm quite sure I have all the components placed correctly.

If you think everything is where it should be, then continue building. It just might be your scope, since you haven't told us what that is.

Should I follow your previous advice and carry on with the mixer installation, or is there a particular area I should troubleshoot first (reflow solder connections, etc.)?

Too many possibilities Jerry. I'd keep building unless you want to stop here for a moment and send me a couple of clearly focused photos of the VXO area and have another set of eyes take a look at what you've got so far. I'd be happy to do that. Send them directly as I don't think the reflector will allow attachments.

>
> Many thanks.

You bet.....
>
> Jerry AA6KI

72,

Jim, K8IQY

# 165. Re: Pre-Mixer Sanity Check

Yahoo group: SS-40
Date: 2011-06-11 18:02:24 UTC
From: jpalsson
Topic: 161  Message: 165

Thanks, Jim -- I'll pause at this stage and send you some pictures.

I verified that TR2 and TR1 (1K and 10K respectively) are right. And TR2 is indeed fully clockwise. I use a Sprague-Goodman GTT-7 tool to make the adjustments.

My scope is a 50 MHz Tektronix 2225, and I'm using a 10X probe (double-checked its compensation this morning). Though I'm no expert with the scope, I *think* I have the basics down OK. Could be human error though.

Again, I really appreciate how helpful you've been.

Jerry AA6KI

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 6/10/2011 10:58 PM, Jerry AA6KI wrote:
> > Jim, I've finished the VXO stage, but I'm still getting very low drive. Watching my scope while rotating TR2, I see a range from several millivolts to about 1.5V P-P.
>
> The 1.5 volts p-p is a bit low, but its the several millivolts that
> has me worried. Make sure that TR2, to tuning pot is fully CW when
> doing the measurements and see if that changes anything. Also,
> confirm that trimmer pot TR2 is the 1K unit, not the 10K unit that is
> supposed to be used in the Audio Amp.
>
> I'm measuring it at mixer pad 6, which I take to be the one across
> from pad 1 (dotted).
>
> Yep, that's the correct location.
> >
> > I'm quite sure I have all the components placed correctly.
>
> If you think everything is where it should be, then continue building.
> It just might be your scope, since you haven't told us what that is.
>
> Should I follow your previous advice and carry on with the mixer
> installation, or is there a particular area I should troubleshoot
> first (reflow solder connections, etc.)?
>
> Too many possibilities Jerry. I'd keep building unless you want to
> stop here for a moment and send me a couple of clearly focused photos
> of the VXO area and have another set of eyes take a look at what
> you've got so far. I'd be happy to do that. Send them directly as I
> don't think the reflector will allow attachments.
>
> >

> > Many thanks.
>
> You bet.....
> >
> > Jerry AA6KI
>
> 72,
>
> Jim, K8IQY
>

# 166. Re: [SS-40] Re: Pre-Mixer Sanity Check

Yahoo group: SS-40
Date: 2011-06-11 18:07:09 UTC
From: Jim Kortge
Topic: 161  Message: 166

On 6/11/2011 2:02 PM, jpalsson wrote:
> Thanks, Jim -- I'll pause at this stage and send you some pictures.

OK, that's a good way to proceed I think.
>
> I verified that TR2 and TR1 (1K and 10K respectively) are right. And TR2 is indeed fully clockwise. I use a Sprague-Goodman GTT-7 tool to make the adjustments.

Gosh, you even have the right tool! :-)

>
> My scope is a 50 MHz Tektronix 2225, and I'm using a 10X probe (double-checked its compensation this morning). Though I'm no expert with the scope, I *think* I have the basics down OK.

Yes, that scope is more than adequate.

Could be human error though.

Probably not. Maybe we can see something in the photos.

72,

Jim, K8IQY

# 167. Re: Pre-Mixer Sanity Check

Yahoo group: SS-40
Date: 2011-06-11 19:24:06 UTC
From: Jerry AA6KI
Topic: 161  Message: 167

I wasn't sure at first who had recommended the GTT-7, but it must have been you (on another list). :)

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 6/11/2011 2:02 PM, jpalsson wrote:
> > Thanks, Jim -- I'll pause at this stage and send you some pictures.
>
> OK, that's a good way to proceed I think.
> >
> > I verified that TR2 and TR1 (1K and 10K respectively) are right. And TR2 is indeed fully clockwise. I use a Sprague-Goodman GTT-7 tool to make the adjustments.
>
> Gosh, you even have the right tool! :-)
>
> >
> > My scope is a 50 MHz Tektronix 2225, and I'm using a 10X probe (double-checked its compensation this morning). Though I'm no expert with the scope, I *think* I have the basics down OK.
>
> Yes, that scope is more than adequate.
>
> Could be human error though.
>
> Probably not. Maybe we can see something in the photos.
>
> 72,
>
> Jim, K8IQY
>

# 168. Re: [SS-40] winding transformer T1

Yahoo group: SS-40
Date: 2011-06-11 20:08:48 UTC
From: Martin / K0BXB
Topic: 160  Message: 168

I had some of my own wire that was a different color so did the second winding using that. It made keeping track much easier.

Martin K0BXB

From: Jim Kortge
Sent: Saturday, June 11, 2011 8:17 AM
To: SS-40@yahoogroups.com
Cc: O. Alan Jones
Subject: Re: [SS-40] winding transformer T1

On 6/10/2011 10:22 PM, O. Alan Jones wrote:
> Good Evening Folks,

Greetings Alan,

> I have a question about winding transformer T1.
> After winding the transformer with the first piece of 6" wire should I
> have 4 turns visible on one side and 3 turns visible on the side that
> both wires come out?

Yes, that's exactly what you should have. The visible 4-turns will be on the side opposite the side where the wires ends are. Then you turn the core around and repeat the whole process. Harder to see the turns though at that point. I thought I made all of that clear in the Assembly Manual, but maybe not since you have a question about it.
>
> Alan
> N8WQ

72,

Jim, K8IQY

# 169. Build Complete

Yahoo group: SS-40
Date: 2011-06-12 00:06:21 UTC
From: O. Alan Jones
Topic: 169  Message: 169

Howdy Gang,
This evening I finished building the SS-40 receiver. I was amazed at how nice this receiver sounds!
At the final testing phase I just hooked up a 4 foot aligator clip with a resistor lead on one end and listened to K1OV and W2LB having a qso. Both signals were 559 ! Then I hooked up my 40 meter dipole and bam, the audio about blew my ears off! LOL
I cranked the volume down and tweaked the AGC setting and the audio is excellent. I am using ipod ear buds for my headphones.

Thanks to Jim K8IQY and the Four State QRP Group for an excellent receiver kit. Good job guys!
Now it is time to move on to my MagicBox.

73,
Alan
N8WQ

# 170. Re: [SS-40] Build Complete

Yahoo group: SS-40
Date: 2011-06-12 00:49:48 UTC
From: Jim Kortge
Topic: 169  Message: 170

On 6/11/2011 8:06 PM, O. Alan Jones wrote:
> Howdy Gang,
> This evening I finished building the SS-40 receiver. I was amazed at how
> nice this receiver sounds!
> At the final testing phase I just hooked up a 4 foot aligator clip with
> a resistor lead on one end and listened to K1OV and W2LB having a qso.
> Both signals were 559 ! Then I hooked up my 40 meter dipole and bam, the
> audio about blew my ears off! LOL
> I cranked the volume down and tweaked the AGC setting and the audio is
> excellent. I am using ipod ear buds for my headphones.
>
> Thanks to Jim K8IQY and the Four State QRP Group for an excellent
> receiver kit. Good job guys!
> Now it is time to move on to my MagicBox.
>
> 73,
> Alan
> N8WQ
>

Alan,

Thanks for the nice comments on the SS-40 Receiver. Many of us share
your enthusiasm! :-) You should try it on a good speaker too.

72,

Jim, K8IQY

# 171. Enclosure complete

Yahoo group: SS-40
Date: 2011-06-13 00:14:55 UTC
From: Paul
Topic: 171  Message: 171

I put my SS-40 in a TP-41 last night, along with a 5-turn put that I picked up.

Real nice, though with the 5 turns it is easy to forget what frequency you are at. I have a KD1JV "digital dial" (frequency counter) that I built last year, that I'm thinking of putting into a small box of its own. Since it costs almost as much as the receiver, I'd like to share it among multiple projects - hi

How bad of and idea is it to pull the VFO signal out through a phono jack on the back from mixer pad 6? Is there a better spot? Probably pull it out via the smallest value capacitor that will still give me a stable count. Any thoughts?

# 172. Yet another SS-40 finished

Yahoo group: SS-40
Date: 2011-06-13 00:27:42 UTC
From: Jerry AA6KI
Topic: 172  Message: 172

I completed my build this morning. Now I'm just waiting for 40m to come alive so I can check the final alignment. Incidentally, my Mastech bench supply indicates that the receiver is drawing between 50 and 60 mA. That's in line with the spec, I believe.

This build has been a LOT of fun, and I learned a great deal. Except for one blunder (soldering R31 incorrectly, resulting in very low drive to the mixer), it went very well. And Jim Kortge has been extremely helpful!

Side note: My HF Test Set (also from 4SQRP) was invaluable for this project. That kit has now been retired, so I'm glad I got it when I did. :)

# 173. Re: Enclosure complete

Yahoo group: SS-40
Date: 2011-06-13 00:36:43 UTC
From: Jerry AA6KI
Topic: 171  Message: 173

I'm glad you asked that question, because I'm thinking along the same lines. I have both the KD1JV and the N3ZI digital dials to choose from. It would be good to know if this is feasible.

Jerry AA6KI

--- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@...> wrote:
>
> I put my SS-40 in a TP-41 last night, along with a 5-turn put that I picked up.
>
> Real nice, though with the 5 turns it is easy to forget what frequency you are at. I have a KD1JV "digital dial" (frequency counter) that I built last year, that I'm thinking of putting into a small box of its own. Since it costs almost as much as the receiver, I'd like to share it among multiple projects - hi
>
> How bad of and idea is it to pull the VFO signal out through a phono jack on the back from mixer pad 6? Is there a better spot? Probably pull it out via the smallest value capacitor that will still give me a stable count. Any thoughts?
>

# 174. Re: [SS-40] Enclosure complete

Yahoo group: SS-40
Date: 2011-06-13 00:54:04 UTC
From: Jim Kortge
Topic: 171  Message: 174

On 6/12/2011 8:14 PM, Paul wrote:
> I put my SS-40 in a TP-41 last night, along with a 5-turn put that I picked up.
>
> Real nice, though with the 5 turns it is easy to forget what frequency you are at. I have a KD1JV "digital dial" (frequency counter) that I built last year, that I'm thinking of putting into a small box of its own. Since it costs almost as much as the receiver, I'd like to share it among multiple projects - hi
>
> How bad of and idea is it to pull the VFO signal out through a phono jack on the back from mixer pad 6? Is there a better spot? Probably pull it out via the smallest value capacitor that will still give me a stable count. Any thoughts?

Take it off the emitter of Q8 with a 4.7 pF capacitor or put an
additionl single turn on T1 and use that to drive the counter. Let us
know how it works because I don't think anyone has done that yet.

72,

Jim, K8IQY

# 175. Re: [SS-40] Enclosure complete

Yahoo group: SS-40
Date: 2011-06-13 01:02:16 UTC
From: Doug Person
Topic: 171  Message: 175

I'm glad this subject has been brought up. I'm planning on using the
KD1JV display.

72, Doug -- K0DXV

On 6/12/2011 6:54 PM, Jim Kortge wrote:
> On 6/12/2011 8:14 PM, Paul wrote:
>> I put my SS-40 in a TP-41 last night, along with a 5-turn put that I picked up.
>>
>> Real nice, though with the 5 turns it is easy to forget what frequency you are at. I have a KD1JV "digital dial" (frequency counter) that I built last year, that I'm thinking of putting into a small box of its own. Since it costs almost as much as the receiver, I'd like to share it among multiple projects - hi
>>
>> How bad of and idea is it to pull the VFO signal out through a phono jack on the back from mixer pad 6? Is there a better spot? Probably pull it out via the smallest value capacitor that will still give me a stable count. Any thoughts?
> Take it off the emitter of Q8 with a 4.7 pF capacitor or put an
> additionl single turn on T1 and use that to drive the counter. Let us
> know how it works because I don't think anyone has done that yet.
>
> 72,
>
> Jim, K8IQY
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

# 176. Re: [SS-40] Re: Enclosure complete

Yahoo group: SS-40
Date: 2011-06-13 09:46:40 UTC
From: Carlo Strozzi
Topic: 171  Message: 176

On Mon, Jun 13, 2011 at 12:36:43AM -0000, Jerry AA6KI wrote:
> I'm glad you asked that question, because I'm thinking along the same
> lines. I have both the KD1JV and the N3ZI digital dials to choose from.
> It would be good to know if this is feasible.

Jerry,

the reason why I didn't put a multi-turn pot in my SS-40 is precisely that
if you put one then you need a frequency indicator of some kind. Both the
KD1JV and the N3ZI digital dials are a bit overkill for this purpose, while
something like the following would have been perfect, had it not sold-out:

http://wb9kzy.com/mcount2.htm

Fortunately I bought a couple of them while they were still available, so
if I eventually add a multi-turn pot to my SS-40 I'll probably use one of
those as a frequency indicator.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 177. Re: Enclosure complete

Yahoo group: SS-40
Date: 2011-06-13 12:16:20 UTC
From: Dave AA7EE
Topic: 171  Message: 177

The only problem I can see with sharing a digital frequency readout between multiple rigs is that unless each radio has exactly the same IF, you'll need to recalibrate the readout every time you plug it into a new radio - unless you're happy with the display reading the local oscillator frequency directly and doing your own calculations as to the frequency that you're on,

Dave
AA7EE

--- In SS-40@yahoogroups.com, "Paul" <paul.d.rose@...> wrote:
>
> I put my SS-40 in a TP-41 last night, along with a 5-turn put that I picked up.
>
> Real nice, though with the 5 turns it is easy to forget what frequency you are at. I have a KD1JV "digital dial" (frequency counter) that I built last year, that I'm thinking of putting into a small box of its own. Since it costs almost as much as the receiver, I'd like to share it among multiple projects - hi
>
> How bad of and idea is it to pull the VFO signal out through a phono jack on the back from mixer pad 6? Is there a better spot? Probably pull it out via the smallest value capacitor that will still give me a stable count. Any thoughts?
>

# 178. Frequency display...

Yahoo group: SS-40
Date: 2011-06-13 13:00:47 UTC
From: Jacques
Topic: 178  Message: 178

I think one of the most attractive and cost effective frequency display is the one developed by Steven KD1JV for the ATS3B (1 digit LED + morse code annunciator) with possibility for the user to choose one or the other method or both. Consumes very few energy (on demand with push-button), few space, few components, ...
73 de Jake, ON4YZ

# 179. Re: Enclosure complete

Yahoo group: SS-40
Date: 2011-06-13 13:11:15 UTC
From: Paul
Topic: 171  Message: 179

The N3ZI counter (mentioned by Jerry AA6KI) makes this easier, as you can program in the offset (rather than measure/store the BFO frequency), I think some versions can even store multiple offsets.

--- In SS-40@yahoogroups.com, "Dave AA7EE" <djdaverichards@...> wrote:
> The only problem I can see with sharing a digital frequency readout between multiple rigs is that unless each radio has exactly the same IF, you'll need to recalibrate the readout every time you plug it into a new radio - unless you're happy with the display reading the local oscillator frequency directly and doing your own calculations as to the frequency that you're on,
>
> Dave
> AA7EE

# 180. Re: [SS-40] Frequency display...

Yahoo group: SS-40
Date: 2011-06-13 13:18:50 UTC
From: Stephen Farthing
Topic: 178  Message: 180

Guys,

Please check out my friend Hans', G0UPL, site at
http://www.hanssummers.com/sfreq.html for a small set of novel frequency
counters in the QRP tradition of more from less!

73s

Steve G0XAR

On 13 June 2011 14:00, Jacques <jacques.matlet@...> wrote:

>
>
> I think one of the most attractive and cost effective frequency display is
> the one developed by Steven KD1JV for the ATS3B (1 digit LED + morse code
> annunciator) with possibility for the user to choose one or the other method
> or both. Consumes very few energy (on demand with push-button), few space,
> few components, ...
> 73 de Jake, ON4YZ
>
>
>

--
It is vain to do with more that which can be done with less.

# 181. Re: [SS-40] Frequency display...

Yahoo group: SS-40
Date: 2011-06-13 13:19:39 UTC
From: Jim Kortge
Topic: 178  Message: 181

On 6/13/2011 9:00 AM, Jacques wrote:
> I think one of the most attractive and cost effective frequency display is the one developed by Steven KD1JV for the ATS3B (1 digit LED + morse code annunciator) with possibility for the user to choose one or the other method or both. Consumes very few energy (on demand with push-button), few space, few components, ...
> 73 de Jake, ON4YZ

There are others to consider too if a CW readout is acceptable. The old Arizona QRP Singer Stinger (or is it Stinger Singer) would work well as would a Small Wonders Lab Frequency Mite, which is a current production item. Both allow for programmable offsets, so that the readout would be correct for the SS-40. The output audio could be hosed up to the audio chain of the SS-40 without a great deal of effort. We would have to work out the details of doing that!

72,

Jim, K8IQY

PS...Dan Tayloe, N7VE is still the owner of the Singer Stinger design. Maybe he would consider doing a run of kits if there were enough interest, or the Arizona QRP gang, but I'm not going to open that box; someone else can though.....

# 182. Remoting a Digital Display

Yahoo group: SS-40
Date: 2011-06-13 14:16:59 UTC
From: WA0ITP
Topic: 182  Message: 182

>> How bad of and idea is it to pull the VFO signal out through a
>> phono jack on the back "
I did that for both my MAS80 and Ft Tuthill, and it worked well, They
both have DC receivers so no offset was needed.

A different (homebrew) counter design was used and the display
miltiplexing noise was difficult to remove (especially on the MAS).
It took both a 12 line filter with large capacitors, and also some
isolation between the receiver oscillator and the counter input. Jim
has a nice little amp design that worked well for this.
http://www.k8iqy.com/miscellaneous/23dbbipolarddsamplifier/23dbddsamplifier.htm

I'm installing a KD1JV Digital Dial in my 2N2/20 and detect vy little
multiplexing noise. This one is the newer version with 2200 ohm
resistors in series with the display segments. The older counter
version definitely requires a line filter when used on Jim's
receivers.

Another frequency indicator that may be adequate for some is a
calibration chart. It is a dial that can be added to the front panel
under the tuning knob. The Tut80 is a good example
http://www.wa0itp.com/ A decal set is being worked up for the SS-40
and maybe one can be included, we'll investigate that possibility.

Enjoy adding the counter or the Cal chart, either will make a nice
addition to the receiver.

---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Paul" <paul.d.rose@...>
To: <SS-40@yahoogroups.com>
Sent: Sunday, June 12, 2011 7:14 PM
Subject: [SS-40] Enclosure complete

|I put my SS-40 in a TP-41 last night, along with a 5-turn put that I
picked up.
|
| Real nice, though with the 5 turns it is easy to forget what
frequency you are at. I have a KD1JV "digital dial" (frequency
counter) that I built last year, that I'm thinking of putting into a

small box of its own. Since it costs almost as much as the
receiver, I'd like to share it among multiple projects - hi
|
| How bad of and idea is it to pull the VFO signal out through a phono
jack on the back from mixer pad 6? Is there a better spot?
Probably pull it out via the smallest value capacitor that will still
give me a stable count. Any thoughts?
|
|
|
| ------------------------------------
|
| Yahoo! Groups Links
|
|
|

# 183. Re: Remoting a Digital Display

Yahoo group: SS-40
Date: 2011-06-13 15:04:52 UTC
From: Paul
Topic: 182  Message: 183

Thanks for the tips.

I'm pretty sure I have the older one with the 1K segment resistors. That kit was my intro to SMT soldering, an experience I won't soon forget. Spent more time finding a little tan SMT capacitor that went flying into my tan carpet than building the rest of the kit.

I'm planning on running the KD1JV display board from a separate 9V battery (and leaving it off most of the time). Hopefully that will help. I imagine that coupling via the power supply causes at least as much trouble as noise coupled back from the counter input.

Paul - K0EET

--- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@...> wrote:
>
> >> How bad of and idea is it to pull the VFO signal out through a
> >> phono jack on the back "
> I did that for both my MAS80 and Ft Tuthill, and it worked well, They
> both have DC receivers so no offset was needed.
>
> A different (homebrew) counter design was used and the display
> miltiplexing noise was difficult to remove (especially on the MAS).
> It took both a 12 line filter with large capacitors, and also some
> isolation between the receiver oscillator and the counter input. Jim
> has a nice little amp design that worked well for this.
> http://www.k8iqy.com/miscellaneous/23dbbipolarddsamplifier/23dbddsamplifier.htm
>
> I'm installing a KD1JV Digital Dial in my 2N2/20 and detect vy little
> multiplexing noise. This one is the newer version with 2200 ohm
> resistors in series with the display segments. The older counter
> version definitely requires a line filter when used on Jim's
> receivers.
>
> Another frequency indicator that may be adequate for some is a
> calibration chart. It is a dial that can be added to the front panel
> under the tuning knob. The Tut80 is a good example
> http://www.wa0itp.com/ A decal set is being worked up for the SS-40
> and maybe one can be included, we'll investigate that possibility.
>
> Enjoy adding the counter or the Cal chart, either will make a nice
> addition to the receiver.
>
> ----------
> I love this radio stuff !
> 72, 73 Terry, WAØITP
> wa0itp@...
> www.wa0itp.com

> www.4sqrp.com
> www.qrpspots.com

# 184. Using a Direct Digital VFO

Yahoo group: SS-40
Date: 2011-06-13 17:21:57 UTC
From: huyettm
Topic: 184  Message: 184

While building the SS-40, I also built the WA1FFL Direct Digital VFO from James Haggerty Radio or http://www.wa1ffl.com/. Today I decided to see if I could make that work with my SS-40. So I lifted the end of C50 that connects to the base of Q7 and using another 47pf cap from the VFO injected the signal. Exciting! Without changing the VXO drive level TR2 I tuned the vfo into the 16.230+ range and bingo, signals! It was fun to tune the VFO clear up into the phone band and hear signals. As nearly as I can tell the mixer is happy and everything sounds very clean, just as it did with the internal VXO. Of course 40 meters is near dead at the moment so there were only a few signals to play with so this is not a conclusive experiment, but at least I am encouraged.

By the way, just for fun I tuned the VFO down to 2.6 or so and it also works. I'm not recommending this, it is just fun to play with!

73, Martin K0BXB

# 185. Re: Enclosure complete

Yahoo group: SS-40
Date: 2011-06-14 15:26:12 UTC
From: Jerry AA6KI
Topic: 171  Message: 185

Carlo, I agree it's a bit of overkill. But since I have them already, why not use one of them? Too bad about the Jackson Harbor item being sold out. Chuck Olson does nice work with his kits.

In the meantime, we've received many other suggestions that are more in line with the less-is-more QRP ethos.

Jerry AA6KI

--- In SS-40@yahoogroups.com, Carlo Strozzi <carlos@...> wrote:
>
> On Mon, Jun 13, 2011 at 12:36:43AM -0000, Jerry AA6KI wrote:
> > I'm glad you asked that question, because I'm thinking along the same
> > lines. I have both the KD1JV and the N3ZI digital dials to choose from.
> > It would be good to know if this is feasible.
>
> Jerry,
>
> the reason why I didn't put a multi-turn pot in my SS-40 is precisely that
> if you put one then you need a frequency indicator of some kind. Both the
> KD1JV and the N3ZI digital dials are a bit overkill for this purpose, while
> something like the following would have been perfect, had it not sold-out:
>
> http://wb9kzy.com/mcount2.htm
>
> Fortunately I bought a couple of them while they were still available, so
> if I eventually add a multi-turn pot to my SS-40 I'll probably use one of
> those as a frequency indicator.
>
> ciao,
> Carlo
>
> --
> Software Patents kill Innovation: say NO to Software Patents!
> I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!
>

# 186. Re: [SS-40] Re: Enclosure complete

Yahoo group: SS-40
Date: 2011-06-14 15:50:01 UTC
From: Carlo Strozzi
Topic: 171  Message: 186

On Tue, Jun 14, 2011 at 03:26:12PM -0000, Jerry AA6KI wrote:
> Carlo, I agree it's a bit of overkill. But since I have them already, why not use one of them?

Jerry,

well, yes, of course that makes perfectly sense.

> Too bad about the Jackson Harbor item being sold out. Chuck Olson does nice work with his kits.

I agree. Chuck makes fine kits, I've bought several times from his shop
and I'm very pleased with his products. Short of the Mcount2, Dave Benson's
FreqMite is another good choice. I haven't got one personally but I bought
the whole line of Rockmites and I have no reason to think that the FreqMite
isn't just as good.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 187. Receiver finished and receiving but .....

Yahoo group: SS-40
Date: 2011-06-16 16:29:34 UTC
From: john@all-the-facts.com
Topic: 187  Message: 187

Hello all,

I finshed my SS-40 last night and it is working and I know that I can tune up to at least 7.032 because I heard same sig on my TS-2000 at the same time. I still have some play left on Tuning resistor so I think it will go maybe up the at least 7040.

However this is the experience I had while doing the "TESTING".

1. Adjusting TC3, TC2 and TC1 makes no difference in the band noise level.

2. I somehow finished up without C14 and C15 which are 120 pF. I had some 150pF that I subsituted. Because I couldn't stand it till I heard it work!!!

3. Adjusting TR4 does change the audio tone but signals are still somewhat "raspy". I was trying to adjust it again this morning with 2 guys on 7032 that had very wide signals and doing very high speed cw.

4. TR1 is supposed to set the AGC level. I measured 1.417 volts and adjustment of TR1 did not vary the voltage at all.
5. The audio level pot does not start to change the audio level until it reaches it mid point.
It works, it hears cw signals where it should and it drives a little iPod speakers rather nicely. I also had fun building it. I am also sure that whatever problems I have were made by me.

73, John NS5Z

Bossier City, Louisiana
EM-32, QRP-ARCI, G-QRP, ARRL, RSGB

# 188. Re: [SS-40] Receiver finished and receiving but .....

Yahoo group: SS-40
Date: 2011-06-16 18:22:17 UTC
From: Jim Kortge
Topic: 187  Message: 188

On 6/16/2011 12:29 PM, john@... wrote:
>
> Hello all,

Hello John,

>
> I finshed my SS-40 last night and it is working and I know that I can tune up to at least 7.032 because I heard same sig on my TS-2000 at the same time.

Do you mean down to 7.032, since that is in the direction of the lower part of that band that it will tune?

I still have some play left on Tuning resistor so I think it will go maybe up the at least 7040.

Let's hope so. It ought to tune somewhere around 25 to 28 KHz of the band including 7.040 and 7.030 and up above 7.040 some and below 7.030 by quite a bit more.

>
> However this is the experience I had while doing the "TESTING".
>
> 1. Adjusting TC3, TC2 and TC1 makes no difference in the band noise level.

Something very wrong then. Adjusting any of those trimmers ought to make quite a bit of difference.

>
> 2. I somehow finished up without C14 and C15 which are 120 pF. I had some 150pF that I subsituted. Because I couldn't stand it till I heard it work!!!

If you use that value at C14 and C15, then you need to remove L1 and L2 and take 3-turns off of each of them so that they properly resonate with the 150 pF capacitors that you have used.

>
> 3. Adjusting TR4 does change the audio tone but signals are still somewhat "raspy".

There is no TR4. TR1 is the AGC pot and needs to be set a bit shy of its mid point as a starting point. A bit up and down from there with a good signal into the rig to find the "sweet spot" where the audio doesn't pop a the beginning of each CW character nor distort.

I was trying to adjust it again this morning with 2 guys on 7032 that had very wide signals and doing very high speed cw.
>
> 4. TR1 is supposed to set the AGC level.

It does do that.

I measured 1.417 volts

Where?

and adjustment of TR1 did not vary the voltage at all.

Can't comment on the above until I know where the 1.417 volts was measured.

> 5. The audio level pot does not start to change the audio level until it reaches it mid point.

It is an audio taper pot, so most of the change happens in the last 1/3 of its rotation. It works that way.....

> It works, it hears cw signals where it should and it drives a little iPod speakers rather nicely.

Do those have amplifiers in them? Should not need any additional amplification with this receiver. It will drive a speaker directly to a very loud level. If it isn't doing that, it isn't working correctly.

I also had fun building it. I am also sure that whatever problems I have were made by me.

Well, we don't want to leave the receiver in that condition. Let's get it working correctly, OK?

72 and thanks for the report; but, we have more to do,

Jim, K8IQY

# 189. SS-40 manual in Spanish too! (El manual en EspaÃ±ol)

Yahoo group: SS-40
Date: 2011-06-17 08:54:38 UTC
From: iapizloj
Topic: 189  Message: 189

Folks,
for those of you who read Spanish, and for the Spanish-reader ones who may have trouble with the English version of the manual, there is a full manual in Spanish available at Terry's page

http://www.wa0itp.com/ss40_manual_espanol.pdf

The MagicBox is also posted on the website too, and the NS-40 manual will also be posted in the coming days.

Share and enjoy!

jon, ea2sn

P.D. Para facilitar el montaje de algunos de los equipos proporcionados tan amablemente por el 4 State QRP Club he traducido al espaÃ±ol el manual del receptor SS-40, el de la MagicBox y el del transmisor compaÃ±ero de los anteriores NS-40. Los tenÃ©is disponibles en la pÃ¡gina web de WA0ITP. Si tenÃ©is alguna duda, estoy a vuestra disposiciÃ³n pero, por favor, a travÃ©s de mensajes personales, no vÃa la lista general.
Un saludo cordial a todos. Jon, ea2sn

# 190. VFO for NS-40

Yahoo group: SS-40
Date: 2011-06-17 14:28:30 UTC
From: ae4gm2003
Topic: 190  Message: 190

Hi SS-40 group. I put a message on the NS-40 group and no one commented. I got the NS-40 working on VFO. I had tried long ago to get my Heathkit HG-10 to work. This time I accidentally keyed the rig with the HG-10 in SPOT position. 5 great watts came out of the NS-40. I've made several contacts already and it's doing great for me. My homebrew rms rf probe says I'm getting 6.4 volts out in the SPOT position. Happy Day!!!!!!!!. I also just learned from ham Steve Smith that if I short the antenna input to my Grundig G6 on NS-40 transmit I get TONE instead of growl, so I can use it as a sidetone and freq. adjust. My Tentec 1056 is down right now, but as soon as my parts come in I'm confident it will do the same, allowing me to zero the frequency by ear. This might be useful with the SS-40 to keep from rf overwhelming it in transmit.

# 191. Re: [SS-40] VFO for NS-40

Yahoo group: SS-40
Date: 2011-06-17 15:30:13 UTC
From: Carlo Strozzi
Topic: 190  Message: 191

On Fri, Jun 17, 2011 at 02:28:30PM -0000, ae4gm2003 wrote:
> Hi SS-40 group. I put a message on the NS-40 group and no one
> commented. I got the NS-40 working on VFO.

Yes, driving the NS-40 with a VFO is quite possible. It has
been done also by Hidehiko-san JA9MAT, as described here:

http://www.wa0itp.com/ja9matpiix.html

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 192. Re: [SS-40] VFO for NS-40

Yahoo group: SS-40
Date: 2011-06-17 15:41:41 UTC
From: Brock Winfrey
Topic: 190  Message: 192

Thanks. I saw Hide's page when it came out.  The problem for me was that his setup was very expensive.  I've been looking for a solution that a low budget ham could get to work without breaking the bank.  I would think that any VFO made to key tube rigs that had a SPOT feature would work.  This is boat anchor technology and many hams already have something like this in the back room and can get on the air with it witout buying anything.

Sincerely, Brock Winfrey

--- On Fri, 6/17/11, Carlo Strozzi <carlos@...> wrote:

From: Carlo Strozzi <carlos@...>
Subject: Re: [SS-40] VFO for NS-40
To: SS-40@yahoogroups.com
Date: Friday, June 17, 2011, 11:30 AM

On Fri, Jun 17, 2011 at 02:28:30PM -0000, ae4gm2003 wrote:

> Hi SS-40 group. I put a message on the NS-40 group and no one

> commented. I got the NS-40 working on VFO.

Yes, driving the NS-40 with a VFO is quite possible. It has

been done also by Hidehiko-san JA9MAT, as described here:

http://www.wa0itp.com/ja9matpiix.html

ciao,

Carlo

--

Software Patents kill Innovation: say NO to Software Patents!

I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 193. Re: [SS-40] VFO for NS-40

Yahoo group: SS-40
Date: 2011-06-17 15:47:00 UTC
From: Brock Winfrey
Topic: 190  Message: 193

I also purchased the W1FB Universal VFO kit from Dan's Small Parts.  I could never get it to stop drifting.  It's output was insufficient to key the NS40.  I put in a step up transformer (toriod) and it put out a horrible signal and ate the 2N7000 transistor every few minutes.  The HG-10 in Spot is a big breakthrough for me.

Sincerely, Brock Winfrey

--- On Fri, 6/17/11, Carlo Strozzi <carlos@...> wrote:

From: Carlo Strozzi <carlos@...>
Subject: Re: [SS-40] VFO for NS-40
To: SS-40@yahoogroups.com
Date: Friday, June 17, 2011, 11:30 AM

On Fri, Jun 17, 2011 at 02:28:30PM -0000, ae4gm2003 wrote:

> Hi SS-40 group. I put a message on the NS-40 group and no one

> commented. I got the NS-40 working on VFO.

Yes, driving the NS-40 with a VFO is quite possible. It has

been done also by Hidehiko-san JA9MAT, as described here:

http://www.wa0itp.com/ja9matpiix.html

ciao,

Carlo

--

Software Patents kill Innovation: say NO to Software Patents!

I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 194. Re: [SS-40] VFO for NS-40

Yahoo group: SS-40
Date: 2011-06-17 15:53:01 UTC
From: Carlo Strozzi
Topic: 190  Message: 194

On Fri, Jun 17, 2011 at 08:41:41AM -0700, Brock Winfrey wrote:
> Thanks. I saw Hide's page when it came out.? The problem for me was
> that his setup was very expensive.? I've been looking for a solution
> that a low budget ham could get to work without breaking the bank.? I

Brock,

yes, Hidehiko-san's VFO sure is overkill for the NS-40, obviously
any barebones VFO would work, provided it outputs a strong enough signal.
In fact I'm also considering to build a general-purpose VFO, probably
the one by N3ZI http://www.pongrance.com/super-dds.html . One such
thing would be a very useful station accessory, and not just to drive
the NS-40 of course.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 195. VFO for NS-40

Yahoo group: SS-40
Date: 2011-06-17 15:54:34 UTC
From: ae4gm2003
Topic: 190  Message: 195

Another point on a VFO that will key tube rigs and have a spot feature to be able to key the NS-40. I've looked all over the internet for a DDS VFO that would approach the voltage to key tube rigs. So far I've only found a kit that cost $178. That may be a fair price, but I don't want to spend that kind of money.

# 196. Re: [SS-40] VFO for NS-40

Yahoo group: SS-40
Date: 2011-06-17 15:59:39 UTC
From: Brock Winfrey
Topic: 190  Message: 196

N3ZI makes great products.  I have 2 of Doug Pongrance's Digital Dials and they are fantastic.  His DDS  VFO only puts out 250 millivolts rf.  That isn't even close to what it takes to key the NS-40.

Sincerely, Brock Winfrey

--- On Fri, 6/17/11, Carlo Strozzi <carlos@linux.it> wrote:

From: Carlo Strozzi <carlos@...>
Subject: Re: [SS-40] VFO for NS-40
To: SS-40@yahoogroups.com
Date: Friday, June 17, 2011, 11:53 AM

On Fri, Jun 17, 2011 at 08:41:41AM -0700, Brock Winfrey wrote:

> Thanks. I saw Hide's page when it came out.  The problem for me was

> that his setup was very expensive.  I've been looking for a solution

> that a low budget ham could get to work without breaking the bank.  I

Brock,

yes, Hidehiko-san's VFO sure is overkill for the NS-40, obviously

any barebones VFO would work, provided it outputs a strong enough signal.

In fact I'm also considering to build a general-purpose VFO, probably

the one by N3ZI http://www.pongrance.com/super-dds.html . One such

thing would be a very useful station accessory, and not just to drive

the NS-40 of course.

ciao,

Carlo

--

Software Patents kill Innovation: say NO to Software Patents!

I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 197. NS-40 My problems turn out to be failure to read instructions!!!

Yahoo group: SS-40
Date: 2011-06-17 17:03:44 UTC
From: john@all-the-facts.com
Topic: 197  Message: 197

I posted a long msg yesterday about no change in signal levels when adjusting the input filter caps.

It turns out that I was trying to adjust them without an antenna connected. Once I connected an antenna everything went fine. It is a hot little receiver. If I had read the instructions, I would have noted that it said to connect an antenna.

In my own defense, I actually worked it out in my head on my drive home yesterday. It took about 60 seconds of thinking about it.

Please be warned that I am starting on the MagicBox this evening so there will be more stupid questions coming!!! I actually built the NS-40 last year and it works fine with a solid 7 watts out.

72/73, John NS5Z

Bossier City, Louisiana
EM-32, QRP-ARCI, G-QRP, ARRL, RSGB

# 198. Re: [SS-40] VFO for NS-40

Yahoo group: SS-40
Date: 2011-06-17 17:25:49 UTC
From: Carlo Strozzi
Topic: 190  Message: 198

On Fri, Jun 17, 2011 at 08:59:39AM -0700, Brock Winfrey wrote:
> N3ZI makes great products.? I have 2 of Doug Pongrance's Digital Dials and they are fantastic.? His DDS? VFO only puts out 250 millivolts rf.? That isn't even close to what it takes to key the NS-40.

Brock,

yes, I know the output voltage of that VFO is really low, a buffer
amplifier is definitely needed.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 199. Re: [SS-40] VFO for NS-40

Yahoo group: SS-40
Date: 2011-06-17 18:36:43 UTC
From: Brock Winfrey
Topic: 190  Message: 199

I spent a lot of time looking for such a setup with an adequate amplifier.  The cheapest one I found was $178.  AMQRP club makes a dds vfo that puts out 4 watts, but it was pricey too.  Let me know if you find something under $50 or so that will put out enough.  My HG_10 is putting out 6.4 Volts rms rf in spot position.

Sincerely, Brock Winfrey

--- On Fri, 6/17/11, Carlo Strozzi <carlos@...> wrote:

From: Carlo Strozzi <carlos@...>
Subject: Re: [SS-40] VFO for NS-40
To: SS-40@yahoogroups.com
Date: Friday, June 17, 2011, 1:25 PM

On Fri, Jun 17, 2011 at 08:59:39AM -0700, Brock Winfrey wrote:

> N3ZI makes great products.  I have 2 of Doug Pongrance's Digital Dials and they are fantastic.  His DDS  VFO only puts out 250 millivolts rf.  That isn't even close to what it takes to key the NS-40.

Brock,

yes, I know the output voltage of that VFO is really low, a buffer

amplifier is definitely needed.

ciao,

Carlo

--

Software Patents kill Innovation: say NO to Software Patents!

I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 200. Re: Receiver finished and receiving but .....

Yahoo group: SS-40
Date: 2011-06-19 02:15:58 UTC
From: Jerry AA6KI
Topic: 187  Message: 200

"TR4" still appears as of version 1.1A1 of the manual (the latest, I believe) in the final Testing section. I don't know how anyone could adjust it, since it's clearly a typo. :)

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 6/16/2011 12:29 PM, john@... wrote:
> >
> > Hello all,
>
> Hello John,
>
> >
> > I finshed my SS-40 last night and it is working and I know that I can tune up to at least 7.032 because I heard same sig on my TS-2000 at the same time.
>
> Do you mean down to 7.032, since that is in the direction of the lower
> part of that band that it will tune?
>
> I still have some play left on Tuning resistor so I think it will go
> maybe up the at least 7040.
>
> Let's hope so. It ought to tune somewhere around 25 to 28 KHz of the
> band including 7.040 and 7.030 and up above 7.040 some and below 7.030
> by quite a bit more.
>
> >
> > However this is the experience I had while doing the "TESTING".
> >
> > 1. Adjusting TC3, TC2 and TC1 makes no difference in the band noise level.
>
> Something very wrong then. Adjusting any of those trimmers ought to
> make quite a bit of difference.
>
> >
> > 2. I somehow finished up without C14 and C15 which are 120 pF. I had some 150pF that I subsituted. Because I couldn't stand it till I heard it work!!!
>
> If you use that value at C14 and C15, then you need to remove L1 and
> L2 and take 3-turns off of each of them so that they properly resonate
> with the 150 pF capacitors that you have used.
>
> >
> > 3. Adjusting TR4 does change the audio tone but signals are still somewhat "raspy".
>
> There is no TR4. TR1 is the AGC pot and needs to be set a bit shy of

> its mid point as a starting point. A bit up and down from there with
> a good signal into the rig to find the "sweet spot" where the audio
> doesn't pop a the beginning of each CW character nor distort.
>
> I was trying to adjust it again this morning with 2 guys on 7032
> that had very wide signals and doing very high speed cw.
> >
> > 4. TR1 is supposed to set the AGC level.
>
> It does do that.
>
> I measured 1.417 volts
>
> Where?
>
> and adjustment of TR1 did not vary the voltage at all.
>
> Can't comment on the above until I know where the 1.417 volts was
> measured.
>
> > 5. The audio level pot does not start to change the audio level until it reaches it mid point.
>
> It is an audio taper pot, so most of the change happens in the last
> 1/3 of its rotation. It works that way.....
>
> > It works, it hears cw signals where it should and it drives a little iPod speakers rather nicely.
>
> Do those have amplifiers in them? Should not need any additional
> amplification with this receiver. It will drive a speaker directly to
> a very loud level. If it isn't doing that, it isn't working correctly.
>
> I also had fun building it. I am also sure that whatever problems I
> have were made by me.
>
> Well, we don't want to leave the receiver in that condition. Let's
> get it working correctly, OK?
>
> 72 and thanks for the report; but, we have more to do,
>
> Jim, K8IQY
>

# 201. MagicBox and NS40 manuals in Spanish too

Yahoo group: SS-40
Date: 2011-06-19 08:09:10 UTC
From: iapizloj
Topic: 201  Message: 201

Folks,
The manuals have been posted at Terry's page:

http://www.wa0itp.com/4sqrpkitindex.html

under each kit page. I hope this will help. Those are very good kits, and deserve a wider audience.
Be well

jon, ea2sn

P.D. In Spanish: (sin tildes, para que se entienda). Espero que estas versiones os ayuden durante el montaje de los kits.
Los manuales son para el receptor SS40, el transmisor a cristal NS40 y la "caja magica" MagicBox que hace las conmutaciones.
En la pagina de cada kit podreis encontrar el manual en castellano. Espero que lo disfruteis. Un saludo de Jon, EA2SN

# 202. Re: MagicBox and NS40 manuals in Spanish too

Yahoo group: SS-40
Date: 2011-06-19 15:21:33 UTC
From: Jerry AA6KI
Topic: 201  Message: 202

Your translations are a great service, Jon! I know how much work is involved in doing this, even for someone who is completely bilingual. So I'm sure others join me in saying thanks!

Jerry AA6KI

--- In SS-40@...m, "iapizloj" <jon.iza@...> wrote:
>
> Folks,
> The manuals have been posted at Terry's page:
>
> http://www.wa0itp.com/4sqrpkitindex.html
>
> under each kit page. I hope this will help. Those are very good kits, and deserve a wider audience.
> Be well
>
> jon, ea2sn
>
> P.D. In Spanish: (sin tildes, para que se entienda). Espero que estas versiones os ayuden durante el montaje de los kits.
> Los manuales son para el receptor SS40, el transmisor a cristal NS40 y la "caja magica" MagicBox que hace las conmutaciones.
> En la pagina de cada kit podreis encontrar el manual en castellano. Espero que lo disfruteis. Un saludo de Jon, EA2SN
>

# 203. Re: MagicBox and NS40 manuals in Spanish too

Yahoo group: SS-40
Date: 2011-06-19 22:05:19 UTC
From: camqrp@verizon.net
Topic: 201  Message: 203

Jon -Mil gracias para los manuales. Necesito practicar mi Espanol y creo que no hay una manera mejor que leer a cosas de radio en Espanol! Especialmente cuando tratando de construir un radio kit...

73,

Cam N6GA

--- In SS-40@yahoogroups.com, "iapizloj" <jon.iza@...> wrote:
>
> Folks,
> The manuals have been posted at Terry's page:
>
> http://www.wa0itp.com/4sqrpkitindex.html
>
> under each kit page. I hope this will help. Those are very good kits, and deserve a wider audience.
> Be well
>
> jon, ea2sn
>

# 204. VFO for NS-40 word of warning

Yahoo group: SS-40
Date: 2011-06-20 20:25:18 UTC
From: ae4gm2003
Topic: 204  Message: 204

My NS-40 sent a piece of the irf510 pa skyward followed by some smoke. I suspect the HG-10 vfo as the culprit. A word to the wise.

# 205. extend the frequency coverage for the SS40

Yahoo group: SS-40
Date: 2011-06-22 18:40:35 UTC
From: ber8g0ocm
Topic: 205  Message: 205

Hi all,

This is my first post. I have just finished my SS40 and it is incredable! It is so quiet I can't believe it and it is so selective. Just wondering if anyone has extended the frequency coverage? Thanks for all the help so far.

72,

Barry, ai2h

# 206. Re: [SS-40] extend the frequency coverage for the SS40

Yahoo group: SS-40
Date: 2011-06-23 23:13:03 UTC
From: mehhuyett@hotmail.com
Topic: 205  Message: 206

By using an outboard cds vfo I am able to tune the entire band.
Martin k0bxb

Connected by DROID on Verizon Wireless

-----Original message-----
From: ber8g0ocm <ber8g0ocm@...>
To: SS-40@yahoogroups.com
Sent: Wed, Jun 22, 2011 18:40:35 GMT+00:00
Subject: [SS-40] extend the frequency coverage for the SS40

Hi all,

This is my first post. I have just finished my SS40 and it is incredable!
It is so quiet I can't believe it and it is so selective. Just wondering if
anyone has extended the frequency coverage? Thanks for all the help so far.

72,

Barry, ai2h

# 207. Re: [SS-40] Re: Receiver finished and receiving but .....

Yahoo group: SS-40
Date: 2011-06-27 00:10:18 UTC
From: Jim Kortge
Topic: 187  Message: 207

On 6/18/2011 10:15 PM, Jerry AA6KI wrote:
> "TR4" still appears as of version 1.1A1 of the manual (the latest, I believe) in the final Testing section. I don't know how anyone could adjust it, since it's clearly a typo. :)
>

All,

I just fixed the manual so that TR4 now reads TC4. Sorry for any confusion (including me) that might have caused. I'm going to fire my proof reader.....me! :-)

72,

Jim, K8IQY

PS...Terry should have the updated manual on the web site very soon.

# 208. nice combo :-)

Yahoo group: SS-40
Date: 2011-06-27 12:38:39 UTC
From: Carlo Strozzi
Topic: 208  Message: 208

Here it is, looks nice and works great!

http://www.strozzi.it/users/carlo/hamradio/ss-40/epsn5180.html

My companion NS-40 has multiple XTALS, as you can see from the rotary
switch on the front. That will eventually become a Super-VXO.

The keyer sitting on top of the SS-40 is a PK-4.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 209. Re: [SS-40] nice combo :-)

Yahoo group: SS-40
Date: 2011-06-27 21:59:02 UTC
From: Virgil R. Hammond
Topic: 208  Message: 209

Carlo:  Nice work, a pleasure to look at. Dick, N0TGR

---
From: Carlo Strozzi <carlos@...>
To: SS-40 Yahoo Group <SS-40@yahoogroups.com>
Cc: K8IQY-MagicBox@yahoogroups.com
Sent: Mon, June 27, 2011 7:38:39 AM
Subject: [SS-40] nice combo :-)

Here it is, looks nice and works great!

http://www.strozzi.it/users/carlo/hamradio/ss-40/epsn5180.html

My companion NS-40 has multiple XTALS, as you can see from the rotary
switch on the front. That will eventually become a Super-VXO.

The keyer sitting on top of the SS-40 is a PK-4.

ciao,
Carlo

--
Software Patents kill Innovation: say NO to Software Patents!
I Brevetti Software uccidono l'innovazione: di NO ai Brevetti Software!

# 210. Kit Delivery

Yahoo group: SS-40
Date: 2011-06-28 16:12:28 UTC
From: bcdlr
Topic: 210  Message: 210

Was wondering what delivery times are for the kit right now.

Dan - KB9JLO

# 211. SS-40 Status

Yahoo group: SS-40
Date: 2011-06-29 09:37:59 UTC
From: vk2gaz96
Topic: 211  Message: 211

G'day all,

Have just checked on the website and the SS-40 is still "Temporarily out of stock". Is there any time frame for when orders will again be taken.

73 - Garry VK2GAZ

# 212. SS-40 manual

Yahoo group: SS-40
Date: 2011-06-29 15:21:54 UTC
From: Ira B. Rothenhoefer
Topic: 212  Message: 212

There are several manuals on the SS40 web page. Which is the proper one??

Barney/NO0N

# 213. SS-40 Shipping Again

Yahoo group: SS-40
Date: 2011-06-29 20:11:36 UTC
From: WA0ITP
Topic: 213  Message: 213

The first run of the K8IQY high performance SS-40 receiver sold out very quickly and the second run is now ready to ship. In the spirit of continuous improvement and customer satisfaction, between the runs a change was made to improve the tuning rate. An update kit is being offered to first run builders only, the kit is not needed for the second run kits. Details are on the update kit page.

Orders may be placed on the SS-40 web page
http://www.wa0itp.com/ss40.html
and the update kit page
http://www.wa0itp.com/ss40_tuning_pot_retrofit.html
Either kit may be ordered via Paypal, checks or MO are welcomed also.

In other kit news:
The 3rd run of the Magic Box will be ready to ship soon, as will the 5th run of the NS-40. The Ham Can continues to sell well as does the EZkeyer. Links to all Four State Kits can be found here
http://www.wa0itp.com/4sqrpkitindex.html

As always, thank you for supporting the Four State QRP Group. All profit goes toward financing OzarkCon.
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

# 214. Which run do I have?

Yahoo group: SS-40
Date: 2011-06-29 23:02:16 UTC
From: John
Topic: 213  Message: 214

I bought my ss-40 at Dayton, which run do I have????
Thanks. John NS5Z

Sent from my iPhone

On Jun 29, 2011, at 3:11 PM, "WA0ITP" <wa0itp@...> wrote:

> The first run of the K8IQY high performance SS-40 receiver sold out
> very quickly and the second run is now ready to ship. In the spirit of
> continuous improvement and customer satisfaction, between the runs a
> change was made to improve the tuning rate. An update kit is being
> offered to first run builders only, the kit is not needed for the
> second run kits. Details are on the update kit page.
>
> Orders may be placed on the SS-40 web page
> http://www.wa0itp.com/ss40.html
> and the update kit page
> http://www.wa0itp.com/ss40_tuning_pot_retrofit.html
> Either kit may be ordered via Paypal, checks or MO are welcomed also.
>
> In other kit news:
> The 3rd run of the Magic Box will be ready to ship soon, as will the
> 5th run of the NS-40. The Ham Can continues to sell well as does the
> EZkeyer. Links to all Four State Kits can be found here
> http://www.wa0itp.com/4sqrpkitindex.html
>
> As always, thank you for supporting the Four State QRP Group. All
> profit goes toward financing OzarkCon.
> ---
> I love this radio stuff !
> 72, 73 Terry, WAØITP
> wa0itp@...
> www.wa0itp.com
> www.4sqrp.com
> www.qrpspots.com
>
>

# 215. Re: [SS-40] Which run do I have?

Yahoo group: SS-40
Date: 2011-06-30 00:04:55 UTC
From: Jim Kortge
Topic: 213  Message: 215

On 6/29/2011 7:02 PM, John wrote:
> I bought my ss-40 at Dayton, which run do I have????
> Thanks. John NS5Z
>
> Sent from my iPhone

John,

That was a 1st run kit with the 5K audio taper pot.

72,

Jim, K8IQY

# 216. Re: [SS-40] Which run do I have?

Yahoo group: SS-40
Date: 2011-06-30 00:51:38 UTC
From: John
Topic: 213  Message: 216

Thanks guys for the quick answer. I have made my order for the upgrade. 72/72 John

Sent from my iPhone

On Jun 29, 2011, at 7:04 PM, Jim Kortge <jim.k8iqy@...> wrote:

> On 6/29/2011 7:02 PM, John wrote:
> > I bought my ss-40 at Dayton, which run do I have????
> > Thanks. John NS5Z
> >
> > Sent from my iPhone
>
> John,
>
> That was a 1st run kit with the 5K audio taper pot.
>
> 72,
>
> Jim, K8IQY
>
>

# 217. Re: [SS-40] SS-40 manual

Yahoo group: SS-40
Date: 2011-06-30 01:30:12 UTC
From: Jim Kortge
Topic: 212  Message: 217

On 6/29/2011 11:21 AM, Ira B. Rothenhoefer wrote:
>
>
> There are several manuals on the SS40 web page. Which is the proper one??
>
> Barney/NO0N
>
Barney,

If you have the version with the 5K audio taper pot, use that manual.
Based on when you got your receiver, you should use the older V1.0B#
manual on the SS40 web site.

72,

Jim, K8IQY

# 218. Re: [SS-40] SS-40 manual

Yahoo group: SS-40
Date: 2011-06-30 03:40:32 UTC
From: Ira B. Rothenhoefer
Topic: 212  Message: 218

Thank you very much and 73

Barney

On 6/29/2011 8:30 PM, Jim Kortge wrote:
> On 6/29/2011 11:21 AM, Ira B. Rothenhoefer wrote:
>>
>>
>> There are several manuals on the SS40 web page. Which is the proper
>> one??
>>
>> Barney/NO0N
>>
> Barney,
>
> If you have the version with the 5K audio taper pot, use that manual.
> Based on when you got your receiver, you should use the older V1.0B#
> manual on the SS40 web site.
>
>
> 72,
>
> Jim, K8IQY
>
>

# 219. SS-40

Yahoo group: SS-40
Date: 2011-07-13 01:58:53 UTC
From: Ira B. Rothenhoefer
Topic: 219  Message: 219

Hi;

I am to the point in the construction that I am supposed to install a 15 pf capacitor. I see 2 caps that are marked 15 that I think are the proper ones for that slot. I was looking for some that had 150 on them, but nothing....got to run, storm coming

Barney

# 220. Re: [SS-40] SS-40

Yahoo group: SS-40
Date: 2011-07-13 03:13:37 UTC
From: WA0ITP
Topic: 219  Message: 220

Hi Barney, You are keerect, they are marked 15.
---
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Ira B. Rothenhoefer
To: SS-40@yahoogroups.com
Sent: Tuesday, July 12, 2011 8:58 PM
Subject: [SS-40] SS-40

Hi;

I am to the point in the construction that I am supposed to install a 15 pf capacitor. I see 2 caps that are marked 15 that I think are the proper ones for that slot. I was looking for some that had 150 on them, but nothing....got to run, storm coming

Barney

# 221. Re: [SS-40] SS-40

Yahoo group: SS-40
Date: 2011-07-13 13:46:15 UTC
From: Ira B. Rothenhoefer
Topic: 219  Message: 221

Thanks Terry. I would prefer to ask first rather than removing parts.
I'll probably bug you again before this is through.

73/72

Barney

On 7/12/2011 10:13 PM, WA0ITP wrote:
>
> *Hi Barney, You are keerect, they are marked 15. *
> ---
> I love this radio stuff !
> 72, 73 Terry, WA?ITP
> wa0itp@... <mailto:wa0itp@...>
> www.wa0itp.com <http://www.wa0itp.com>
> www.4sqrp.com <http://www.4sqrp.com>
> www.qrpspots.com <http://www.qrpspots.com>
>
>
> ----- Original Message -----
> *From:* Ira B. Rothenhoefer <mailto:barneyro@...>
> *To:* SS-40@yahoogroups.com <mailto:SS-40@yahoogroups.com>
> *Sent:* Tuesday, July 12, 2011 8:58 PM
> *Subject:* [SS-40] SS-40
>
>
> Hi;
>
> I am to the point in the construction that I am supposed to
> install a 15 pf capacitor. I see 2 caps that are marked 15 that I
> think are the proper ones for that slot. I was looking for some
> that had 150 on them, but nothing....got to run, storm coming
>
> Barney
>
>

# 222. Capacitor Markings

Yahoo group: SS-40
Date: 2011-07-14 13:58:59 UTC
From: k9pl
Topic: 219  Message: 222

Here is a useful reference for identifying capacitor values. I printed a copy to use with the SS-40 and future kit building projects.

http://www.elecraft.com/Apps/caps.htm

73,

Philip, K9PL

# 223. Re: [SS-40] Capacitor Markings

Yahoo group: SS-40
Date: 2011-07-14 14:24:40 UTC
From: Ira B. Rothenhoefer
Topic: 219  Message: 223

Yes, that is very useful and somewhat better than I have.. Thanks for sharing..

73

Barney

On 7/14/2011 8:58 AM, k9pl wrote:
>
>
>
> Here is a useful reference for identifying capacitor values. I printed
> a copy to use with the SS-40 and future kit building projects.
>
> http://www.elecraft.com/Apps/caps.htm
>
> 73,
>
> Philip, K9PL
>
>

# 224. SS40 crystals

Yahoo group: SS-40
Date: 2011-07-14 15:28:07 UTC
From: Ira B. Rothenhoefer
Topic: 224  Message: 224

Hi;

I have 4 hc49 crystals. marked 9.21, but also marked on the side with magic marker. They are marked as follows. 610 612 612 and 613. What are those markings for?

The short stubby ones are marked with a 162 included in the series that I presume is the 16.257 crystals

Barney

# 225. Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-14 16:40:58 UTC
From: Paul
Topic: 224  Message: 225

Hi,

This was addressed in more detail in message #80:

http://groups.yahoo.com/group/SS-40/message/80

Those digits represent the last few digits of the series resonant frequency, and used to hand-pick closely matching sets of 4 crystals for the IF filter.

Paul

--- In SS-40@yahoogroups.com, "Ira B. Rothenhoefer" <barneyro@...> wrote:
>
>
>
>
> Hi;
>
> I have 4 hc49 crystals. marked 9.21, but also marked on the side
> with magic marker. They are marked as follows. 610 612 612 and 613.
> What are those markings for?
>
> The short stubby ones are marked with a 162 included in the series
> that I presume is the 16.257 crystals
>
> Barney
>

# 226. ss40

Yahoo group: SS-40
Date: 2011-07-15 00:44:32 UTC
From: Ira B. Rothenhoefer
Topic: 226  Message: 226

Hi;

Let me try this again. My HC49 crystals are marked as follows.
610 612 612 and 613.
_Does it make any difference which crystals go where on the board?_

Barney

# 227. Re: [SS-40] ss40

Yahoo group: SS-40
Date: 2011-07-15 02:32:38 UTC
From: Jim Kortge
Topic: 226  Message: 227

On 7/14/2011 8:44 PM, Ira B. Rothenhoefer wrote:
>
>
> Hi;
>
> Let me try this again. My HC49 crystals are marked as follows. 610 612
> 612 and 613.
> _Does it make any difference which crystals go where on the board?_
>
> Barney
>
>
>

No.....they can be installed in any order without changing the
response of the IF Filter response.

72,

Jim, K8IQY

# 228. Re: [SS-40] ss40

Yahoo group: SS-40
Date: 2011-07-15 02:35:46 UTC
From: O. Alan Jones
Topic: 226  Message: 228

Hi Barney,
It won't make any difference.
Good luck on your build.
My SS-40 works great. Let us know how it works when you are done.

73

O. Alan Jones

--
N8WQ - Canal Winchester, Ohio
CompTIA: A+ Certified Professional

On 7/14/2011 8:44 PM, Ira B. Rothenhoefer wrote:
>
>
>
> Hi;
>
> Let me try this again. My HC49 crystals are marked as follows.
> 610 612 612 and 613.
> _Does it make any difference which crystals go where on the board?_
>
> Barney
>
>
>

# 229. Re: [SS-40] ss40

Yahoo group: SS-40
Date: 2011-07-15 03:00:05 UTC
From: Ira B. Rothenhoefer
Topic: 226  Message: 229

Thanks guys, I appreciate it. I just didn't know for sure. I would rather work more slowly and try not to have to remove parts that were installed wrong.

By the way, I didn't hear any hiss from the product detector in step 5. I had to connect L7 to an antenna and heard quite a bit of noise and some BC rumble so figured it was ok. What do you think?

73

Barney

On 7/14/2011 9:35 PM, O. Alan Jones wrote:
>
> Hi Barney,
> It won't make any difference.
> Good luck on your build.
> My SS-40 works great. Let us know how it works when you are done.
>
> 73
>
> O. Alan Jones
>
> --
> N8WQ - Canal Winchester, Ohio
> CompTIA: A+ Certified Professional
>
> On 7/14/2011 8:44 PM, Ira B. Rothenhoefer wrote:
>>
>>
>>
>> Hi;
>>
>> Let me try this again. My HC49 crystals are marked as follows.
>> 610 612 612 and 613.
>> _Does it make any difference which crystals go where on the board?_
>>
>> Barney
>>
>>
>

# 230. SS40 Frequency variation

Yahoo group: SS-40
Date: 2011-07-19 16:33:21 UTC
From: Ira B. Rothenhoefer
Topic: 230  Message: 230

Hi;

On the SS-40 I am building There is only a 15 kc variation at step ten testing. Have others had this small of variation?

At some settings of TR2, the VXO stops. My battery is at 13.8 volts

73,

Barney

# 231. Re: [SS-40] SS40 Frequency variation

Yahoo group: SS-40
Date: 2011-07-19 23:12:58 UTC
From: Jim Kortge
Topic: 230 Message: 231

On 7/19/2011 12:33 PM, Ira B. Rothenhoefer wrote:
>
> Hi;
>
> On the SS-40 I am building There is only a 15 kc variation at step ten
> testing. Have others had this small of variation?
>
> At some settings of TR2, the VXO stops. My battery is at 13.8 volts
>
> 73,
>
> Barney
>

Barney,

Do you have the cases of the VXO crystals grounded? If not, that will significantly reduce the amount of available tuning. One builder didn't ground them and had about 19 KHz of tuning. It went to 26 KHz when they were grounded.

72,

Jim, K8IQY

# 232. Re: [SS-40] SS40 Frequency variation

Yahoo group: SS-40
Date: 2011-07-20 02:49:42 UTC
From: Ira B. Rothenhoefer
Topic: 230  Message: 232

The two sets of crystals are grounded. I have finished the receiver tonight. Preliminary testing indicates that I have some problem with it. Signals are weak, but steady. I'll double check my work and see if there are some parts in wrong.

73,

Barney

On 7/19/2011 6:12 PM, Jim Kortge wrote:
>
> On 7/19/2011 12:33 PM, Ira B. Rothenhoefer wrote:
> >
> > Hi;
> >
> > On the SS-40 I am building There is only a 15 kc variation at step ten
> > testing. Have others had this small of variation?
> >
> > At some settings of TR2, the VXO stops. My battery is at 13.8 volts
> >
> > 73,
> >
> > Barney
> >
>
> Barney,
>
> Do you have the cases of the VXO crystals grounded? If not, that will
> significantly reduce the amount of available tuning. One builder
> didn't ground them and had about 19 KHz of tuning. It went to 26 KHz
> when they were grounded.
>
> 72,
>
> Jim, K8IQY
>
>

# 233. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-14 19:02:17 UTC
From: Ira B. Rothenhoefer
Topic: 224  Message: 233

I guess the question is, should they be put into the sockets in any special order?

Barney

On 7/14/2011 11:40 AM, Paul wrote:
>
>
>
> Hi,
>
> This was addressed in more detail in message #80:
>
> http://groups.yahoo.com/group/SS-40/message/80
>
> Those digits represent the last few digits of the series resonant
> frequency, and used to hand-pick closely matching sets of 4 crystals
> for the IF filter.
>
> Paul
>
> --- In SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>, "Ira B.
> Rothenhoefer" <barneyro@...> wrote:
> >
> >
> >
> >
> > Hi;
> >
> > I have 4 hc49 crystals. marked 9.21, but also marked on the side
> > with magic marker. They are marked as follows. 610 612 612 and 613.
> > What are those markings for?
> >
> > The short stubby ones are marked with a 162 included in the series
> > that I presume is the 16.257 crystals
> >
> > Barney
> >
>
>

# 234. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-20 15:52:01 UTC
From: WA0ITP
Topic: 224  Message: 234

Hi Barney,

Jim mentioned a while back that the order isnt important.

Enjoy the build and the rcvr
---
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@wa0itp.com
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Ira B. Rothenhoefer
To: SS-40@yahoogroups.com
Sent: Thursday, July 14, 2011 2:02 PM
Subject: Re: [SS-40] Re: SS40 crystals

I guess the question is, should they be put into the sockets in any special
order?

Barney

On 7/14/2011 11:40 AM, Paul wrote:

Hi,

This was addressed in more detail in message #80:

http://groups.yahoo.com/group/SS-40/message/80

Those digits represent the last few digits of the series resonant frequency, and used to
hand-pick closely matching sets of 4 crystals for the IF filter.

Paul

--- In SS-40@yahoogroups.com, "Ira B. Rothenhoefer" <barneyro@...> wrote:
>
>
>
>
> Hi;
>
> I have 4 hc49 crystals. marked 9.21, but also marked on the side
> with magic marker. They are marked as follows. 610 612 612 and 613.
> What are those markings for?
>

> The short stubby ones are marked with a 162 included in the series
> that I presume is the 16.257 crystals
>
> Barney
>

# 235. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-20 17:01:51 UTC
From: Ira B. Rothenhoefer
Topic: 224  Message: 235

I don't know how that happened!! Sorry about the confusion. Must be a ghost in my computer..hi

I am having some problems with the SS40, but it is my error. I'll enumerate those errors in a bit....

73

Barney

On 7/20/2011 10:52 AM, WA0ITP wrote:
>
> *Hi Barney,*
> **
> *Jim mentioned a while back that the order isnt important.*
> **
> *Enjoy the build and the rcvr*
> ---
> I love this radio stuff !
> 72, 73 Terry, WA?ITP
> wa0itp@... <mailto:wa0itp@...>
> www.wa0itp.com <http://www.wa0itp.com>
> www.4sqrp.com <http://www.4sqrp.com>
> www.qrpspots.com <http://www.qrpspots.com>
>
>
> ----- Original Message -----
> *From:* Ira B. Rothenhoefer <mailto:barneyro@...>
> *To:* SS-40@yahoogroups.com <mailto:SS-40@yahoogroups.com>
> *Sent:* Thursday, July 14, 2011 2:02 PM
> *Subject:* Re: [SS-40] Re: SS40 crystals
>
> I guess the question is, should they be put into the sockets in
> any special
> order?
>
> Barney
>
> On 7/14/2011 11:40 AM, Paul wrote:
>>
>>
>>
>> Hi,
>>
>> This was addressed in more detail in message #80:
>>

>> http://groups.yahoo.com/group/SS-40/message/80
>>
>> Those digits represent the last few digits of the series resonant
>> frequency, and used to hand-pick closely matching sets of 4
>> crystals for the IF filter.
>>
>> Paul
>>
>> --- In SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>,
>> "Ira B. Rothenhoefer" <barneyro@...> wrote:
>> >
>> >
>> >
>> >
>> > Hi;
>> >
>> > I have 4 hc49 crystals. marked 9.21, but also marked on the side
>> > with magic marker. They are marked as follows. 610 612 612 and
>> 613.
>> > What are those markings for?
>> >
>> > The short stubby ones are marked with a 162 included in the series
>> > that I presume is the 16.257 crystals
>> >
>> > Barney
>> >
>>
>

# 236. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-20 19:27:00 UTC
From: john@all-the-facts.com
Topic: 224  Message: 236

Hey Ira, I had the same problem whilst building my SS-40. I just touched up the ground strap on the crystals and they straighten up and are flying right. I also looked at all my solder joints and picked around with my dental pick looking for cavities. It I had access to an xray maching I might xray it.

Have you built the Magic Box? I have mine mostly done but have not worked on it in 2 weeks because I am scared to wind the binoucular transformers. Good luck.

73, John NS5Z

Bossier City, Louisiana
EM-32, QRP-ARCI, G-QRP, ARRL, RSGB
-----Original Message-----
From: Ira B. Rothenhoefer [mailto:barneyro@...]
Sent: Thursday, July 14, 2011 02:02 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] Re: SS40 crystals

I guess the question is, should they be put into the sockets in any special
order?

Barney

On 7/14/2011 11:40 AM, Paul wrote:

Hi,

This was addressed in more detail in message #80:

http://groups.yahoo.com/group/SS-40/message/80

Those digits represent the last few digits of the series resonant frequency, and used to hand-pick closely matching sets of 4 crystals for the IF filter.

Paul

--- In mailto:SS-40%40yahoogroups.com, "Ira B. Rothenhoefer" mailto:barneyro@... wrote:
>
>
>
>
> Hi;
>
> I have 4 hc49 crystals. marked 9.21, but also marked on the side
> with magic marker. They are marked as follows. 610 612 612 and 613.
> What are those markings for?
>
> The short stubby ones are marked with a 162 included in the series

> that I presume is the 16.257 crystals
>
> Barney
>

# 237. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-20 21:03:42 UTC
From: Ira B. Rothenhoefer
Topic: 224  Message: 237

Hi John;

I went thru the whole build procedure again today looking for errors. Found a few serious ones. Heck I even left a resistor out. R25 wasn't there, I think it was R25. Also had the wrong value in a couple of places. Those colors on the resistors sometimes don't seem to match the sheet I have. I lifted one end of quite a few suspicious ones, but they measured right.

I think it should do better that it does. The SS40 wasn't copying the same sigs my IC718 was hearing. And the range is off, so I still have a problem with it somewhere.

Yes I have the Magicbox finished, but haven't used it yet. I had to wet my fingers to hold on to the binocular transformer. I forget the number of turns, but just start at one side and run the wirer in one hole around the other side and back to the first hole. Not much to it, just keeping track of the turns.

73 and good luck..

Barney

On 7/20/2011 2:27 PM, john@... wrote:
> Hey Ira, I had the same problem whilst building my SS-40. I just
> touched up the ground strap on the crystals and they straighten up and
> are flying right. I also looked at all my solder joints and picked
> around with my dental pick looking for cavities. It I had access to
> an xray maching I might xray it.
> Have you built the Magic Box? I have mine mostly done but have not
> worked on it in 2 weeks because I am scared to wind the binoucular
> transformers. Good luck.
> 73, John NS5Z
>
> Bossier City, Louisiana
> EM-32, QRP-ARCI, G-QRP, ARRL, RSGB
>
> -----Original Message-----
> *From:* Ira B. Rothenhoefer [mailto:barneyro@...]
> *Sent:* Thursday, July 14, 2011 02:02 PM
> *To:* SS-40@yahoogroups.com
> *Subject:* Re: [SS-40] Re: SS40 crystals
>
> I guess the question is, should they be put into the sockets in
> any special
> order?

>
> Barney
>
> On 7/14/2011 11:40 AM, Paul wrote:
>
>>
>>
>> Hi,
>>
>> This was addressed in more detail in message #80:
>>
>> http://groups.yahoo.com/group/SS-40/message/80
>>
>> Those digits represent the last few digits of the series resonant
>> frequency, and used to hand-pick closely matching sets of 4
>> crystals for the IF filter.
>>
>> Paul
>>
>> --- In mailto:SS-40%40yahoogroups.com, "Ira B. Rothenhoefer"
>> mailto:barneyro@... wrote:
>> >
>> >
>> >
>> >
>> > Hi;
>> >
>> > I have 4 hc49 crystals. marked 9.21, but also marked on the side
>> > with magic marker. They are marked as follows. 610 612 612 and
>> 613.
>> > What are those markings for?
>> >
>> > The short stubby ones are marked with a 162 included in the series
>> > that I presume is the 16.257 crystals
>> >
>> > Barney
>> >
>>
>

# 238. RE: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-21 00:09:12 UTC
From: John
Topic: 224 Message: 238

I finished my SS40 last night. It seems to work ok. For the resistors, I took no chances. I used on ohmmeter on each one as I was installing it because I didn't trust my eyes and the colors. I guess a yellow band on a blue resistor still makes for a green band :) Anyway, I think the time it took to measure each one was way less than back tracking to find an error that I probably would have made.

73
John
WB6HVH

---

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Ira B. Rothenhoefer
Sent: Wednesday, July 20, 2011 2:04 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] Re: SS40 crystals

Hi John;

I went thru the whole build procedure again today looking for errors. Found a few serious ones. Heck I even left a resistor out. R25 wasn't there, I think it was R25. Also had the wrong value in a couple of places. Those colors on the resistors sometimes don't seem to match the sheet I have. I lifted one end of quite a few suspicious ones, but they measured right.

I think it should do better that it does. The SS40 wasn't copying the same sigs my IC718 was hearing. And the range is off, so I still have a problem with it somewhere.

Yes I have the Magicbox finished, but haven't used it yet. I had to wet my fingers to hold on to the binocular transformer. I forget the number of turns, but just start at one side and run the wirer in one hole around the other side and back to the first hole. Not much to it, just keeping track of the turns.

73 and good luck..

Barney

On 7/20/2011 2:27 PM, john@... wrote:

Hey Ira, I had the same problem whilst building my SS-40. I just touched up the ground strap on the crystals and they straighten up and are flying right. I also looked at all my solder joints and picked around with my dental pick looking for cavities. It I had access to an xray maching I might

xray it.

Have you built the Magic Box? I have mine mostly done but have not worked on it in 2 weeks because I am scared to wind the binoucular transformers. Good luck.

73, John NS5Z

Bossier City, Louisiana
EM-32, QRP-ARCI, G-QRP, ARRL, RSGB

-----Original Message-----
From: Ira B. Rothenhoefer [mailto:barneyro@...]
Sent: Thursday, July 14, 2011 02:02 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] Re: SS40 crystals

I guess the question is, should they be put into the sockets in any special order?

Barney

On 7/14/2011 11:40 AM, Paul wrote:

Hi,

This was addressed in more detail in message #80:

http://groups.yahoo.com/group/SS-40/message/80

Those digits represent the last few digits of the series resonant frequency, and used to hand-pick closely matching sets of 4 crystals for the IF filter.

Paul

--- In mailto:SS-40%40yahoogroups.com, "Ira B. Rothenhoefer"
mailto:barneyro@... wrote:
>
>
>
>
> Hi;
>
> I have 4 hc49 crystals. marked 9.21, but also marked on the side
> with magic marker. They are marked as follows. 610 612 612 and 613.
> What are those markings for?
>
> The short stubby ones are marked with a 162 included in the series
> that I presume is the 16.257 crystals
>
> Barney
>

# 239. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-21 01:12:54 UTC
From: Ira B. Rothenhoefer
Topic: 224  Message: 239

You know, I also used my ohm meter on them. I thought I had checked
each one, but I guess not...hi...\

73,

Barney

On 7/20/2011 7:09 PM, John wrote:
>
> I finished my SS40 last night. It seems to work ok. For the
> resistors, I took no chances. I used on ohmmeter on each one as I was
> installing it because I didn't trust my eyes and the colors. I guess
> a yellow band on a blue resistor still makes for a green band :)
> Anyway, I think the time it took to measure each one was way less than
> back tracking to find an error that I probably would have made.
> 73
> John
> WB6HVH
> ---
> *From:* SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] *On
> Behalf Of *Ira B. Rothenhoefer
> *Sent:* Wednesday, July 20, 2011 2:04 PM
> *To:* SS-40@yahoogroups.com
> *Subject:* Re: [SS-40] Re: SS40 crystals
>
> Hi John;
>
> I went thru the whole build procedure again today looking for
> errors. Found a few serious ones. Heck I even left a resistor out.
> R25 wasn't there, I think it was R25. Also had the wrong value in a
> couple of places. Those colors on the resistors sometimes don't seem
> to match the sheet I have. I lifted one end of quite a few suspicious
> ones, but they measured right.
>
> I think it should do better that it does. The SS40 wasn't
> copying the same sigs my IC718 was hearing. And the range is off, so
> I still have a problem with it somewhere.
>
> Yes I have the Magicbox finished, but haven't used it yet. I had
> to wet my fingers to hold on to the binocular transformer. I forget
> the number of turns, but just start at one side and run the wirer in
> one hole around the other side and back to the first hole. Not much
> to it, just keeping track of the turns.
>
> 73 and good luck..
>

> Barney
>
> On 7/20/2011 2:27 PM, john@... wrote:
>
>> Hey Ira, I had the same problem whilst building my SS-40. I just
>> touched up the ground strap on the crystals and they straighten up
>> and are flying right. I also looked at all my solder joints and
>> picked around with my dental pick looking for cavities. It I
>> had access to an xray maching I might xray it.
>> Have you built the Magic Box? I have mine mostly done but have not
>> worked on it in 2 weeks because I am scared to wind the binoucular
>> transformers. Good luck.
>> 73, John NS5Z
>>
>> Bossier City, Louisiana
>> EM-32, QRP-ARCI, G-QRP, ARRL, RSGB
>>
>> -----Original Message-----
>> *From:* Ira B. Rothenhoefer [mailto:barneyro@...]
>> *Sent:* Thursday, July 14, 2011 02:02 PM
>> *To:* SS-40@yahoogroups.com
>> *Subject:* Re: [SS-40] Re: SS40 crystals
>>
>> I guess the question is, should they be put into the sockets in
>> any special
>> order?
>>
>> Barney
>>
>> On 7/14/2011 11:40 AM, Paul wrote:
>>
>>>
>>>
>>> Hi,
>>>
>>> This was addressed in more detail in message #80:
>>>
>>> http://groups.yahoo.com/group/SS-40/message/80
>>>
>>> Those digits represent the last few digits of the series
>>> resonant frequency, and used to hand-pick closely matching sets
>>> of 4 crystals for the IF filter.
>>>
>>> Paul
>>>
>>> --- In mailto:SS-40%40yahoogroups.com, "Ira B. Rothenhoefer"
>>> mailto:barneyro@... wrote:
>>> >
>>> >
>>> >

```
>>> >
>>> > Hi;
>>> >
>>> > I have 4 hc49 crystals. marked 9.21, but also marked on the side
>>> > with magic marker. They are marked as follows. 610 612 612 and
>>> 613.
>>> > What are those markings for?
>>> >
>>> > The short stubby ones are marked with a 162 included in the
>>> series
>>> > that I presume is the 16.257 crystals
>>> >
>>> > Barney
>>> >
>>>
>
```

# 240. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-21 01:24:55 UTC
From: John
Topic: 224 Message: 240

I appreciate John' HVH's comments and Ira's abt the resistor colors. I homed them all out before sticking them in their holes. I would have done same with caps and chokes but didn't find my AADE meter until almost finished.
72 John ns5z

Sent from my iPhone

On Jul 20, 2011, at 7:09 PM, "John" <jgoodsell@...> wrote:

> I finished my SS40 last night. It seems to work ok. For the resistors, I took no chances. I used on ohmmeter on each one as I was installing it because I didn't trust my eyes and the colors. I guess a yellow band on a blue resistor still makes for a green band :) Anyway, I think the time it took to measure each one was way less than back tracking to find an error that I probably would have made.
>
> 73
> John
> WB6HVH
> From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Ira B. Rothenhoefer
> Sent: Wednesday, July 20, 2011 2:04 PM
> To: SS-40@yahoogroups.com
> Subject: Re: [SS-40] Re: SS40 crystals
>
>
> Hi John;
>
> I went thru the whole build procedure again today looking for errors. Found a few serious ones. Heck I even left a resistor out. R25 wasn't there, I think it was R25. Also had the wrong value in a couple of places. Those colors on the resistors sometimes don't seem to match the sheet I have. I lifted one end of quite a few suspicious ones, but they measured right.
>
> I think it should do better that it does. The SS40 wasn't copying the same sigs my IC718 was hearing. And the range is off, so I still have a problem with it somewhere.
>
> Yes I have the Magicbox finished, but haven't used it yet. I had to wet my fingers to hold on to the binocular transformer. I forget the number of turns, but just start at one side and run the wirer in one hole around the other side and back to the first hole. Not much to it, just keeping track of the turns.
>
> 73 and good luck..
>
> Barney
>
> On 7/20/2011 2:27 PM, john@all-the-facts.com wrote:

>
>>
>> Hey Ira, I had the same problem whilst building my SS-40. I just touched up the ground strap on the crystals and they straighten up and are flying right. I also looked at all my solder joints and picked around with my dental pick looking for cavities. It I had access to an xray maching I might xray it.
>>
>> Have you built the Magic Box? I have mine mostly done but have not worked on it in 2 weeks because I am scared to wind the binoucular transformers. Good luck.
>>
>> 73, John NS5Z
>>
>> Bossier City, Louisiana
>> EM-32, QRP-ARCI, G-QRP, ARRL, RSGB
>>
>> -----Original Message-----
>> From: Ira B. Rothenhoefer [mailto:barneyro@windstream.net]
>> Sent: Thursday, July 14, 2011 02:02 PM
>> To: SS-40@yahoogroups.com
>> Subject: Re: [SS-40] Re: SS40 crystals
>>
>>
>> I guess the question is, should they be put into the sockets in any special
>> order?
>>
>> Barney
>>
>> On 7/14/2011 11:40 AM, Paul wrote:
>>
>>>
>>>
>>>
>>> Hi,
>>>
>>> This was addressed in more detail in message #80:
>>>
>>> http://groups.yahoo.com/group/SS-40/message/80
>>>
>>> Those digits represent the last few digits of the series resonant frequency, and used to hand-pick closely matching sets of 4 crystals for the IF filter.
>>>
>>> Paul
>>>
>>> --- In mailto:SS-40%40yahoogroups.com, "Ira B. Rothenhoefer" mailto:barneyro@... wrote:
>>> >
>>> >
>>> >
>>> >
>>> > Hi;

```
>>> >
>>> > I have 4 hc49 crystals. marked 9.21, but also marked on the side
>>> > with magic marker. They are marked as follows. 610 612 612 and 613.
>>> > What are those markings for?
>>> >
>>> > The short stubby ones are marked with a 162 included in the series
>>> > that I presume is the 16.257 crystals
>>> >
>>> > Barney
>>> >
>>>
>>>
>>
>>
>
>
```

# 241. SS40

Yahoo group: SS-40
Date: 2011-07-21 17:13:21 UTC
From: Ira B. Rothenhoefer
Topic: 241  Message: 241

Hi;

If available, I need the voltage checks for the SS40 receiver. I really think I have a problem in the product detector. During the build, I didn't get the hissing from L7. The only way I could get any noise, was to connect my station antenna to L7.

I never got the .9 volts and it would not increase to 1.4.....Mine was about a .4.....My receiver has receiver noise and the sigs are a little low with the gain all the way up.

Any one have any ideas??

73,

Barney

# 242. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-21 23:29:42 UTC
From: Jim Kortge
Topic: 224  Message: 242

On 7/20/2011 3:27 PM, john@... wrote:

-snip-
>
> Have you built the Magic Box? I have mine mostly done but have not worked on it in 2 weeks because I am scared to wind the binoucular transformers. Good luck.
>
> 73, John NS5Z

John,

Don't be freaked out by those two transformers. They are simple to wind. Just follow the instructions. I can wind up a pair of them for you if that would help. Just let me know.

72,

Jim, K8IQY

# 243. Re: [SS-40] SS40

Yahoo group: SS-40
Date: 2011-07-22 00:08:13 UTC
From: Jim Kortge
Topic: 241  Message: 243

On 7/21/2011 1:13 PM, Ira B. Rothenhoefer wrote:
>
>
>
> Hi;
>
> If available, I need the voltage checks for the SS40 receiver. I
> really think I have a problem in the product detector. During the
> build, I didn't get the hissing from L7. The only way I could get any
> noise, was to connect my station antenna to L7.
>
> I never got the .9 volts and it would not increase to 1.4.....Mine was
> about a .4.....My receiver has receiver noise and the sigs are a
> little low with the gain all the way up.
>
> Any one have any ideas??
>
> 73,
>
> Barney
>

Barney,

If you can't get it working, send it to me at my call book address and
I'll take a whack at fixing it.

72,

Jim, K8IQY

# 244. Re: [SS-40] SS40

Yahoo group: SS-40
Date: 2011-07-22 02:20:38 UTC
From: Ira B. Rothenhoefer
Topic: 241  Message: 244

Ok Jim;

I appreciate that. I don't know if I can trace a signal backwards
from the output, but will try and maybe I can find the problem. I am
going to take another trip through the assembly manual and see if I
really have all the parts in the right place.

It does appear that I have all the right parts in the right places..

With my tuning range around 15 kc, what do I need to check besides the
crystal ground in order to increase it??

73,
Barney

On 7/21/2011 7:08 PM, Jim Kortge wrote:
>
> On 7/21/2011 1:13 PM, Ira B. Rothenhoefer wrote:
> >
> >
> >
> > Hi;
> >
> > If available, I need the voltage checks for the SS40 receiver. I
> > really think I have a problem in the product detector. During the
> > build, I didn't get the hissing from L7. The only way I could get any
> > noise, was to connect my station antenna to L7.
> >
> > I never got the .9 volts and it would not increase to 1.4.....Mine was
> > about a .4.....My receiver has receiver noise and the sigs are a
> > little low with the gain all the way up.
> >
> > Any one have any ideas??
> >
> > 73,
> >
> > Barney
> >
>
> Barney,
>
> If you can't get it working, send it to me at my call book address and
> I'll take a whack at fixing it.
>
> 72,
>

> Jim, K8IQY
>
>

# 245. AGC Question

Yahoo group: SS-40
Date: 2011-07-22 06:32:58 UTC
From: John
Topic: 245  Message: 245

I finished building the SS-40 and it seems to work as it should. The only odd thing I find is when it comes to setting the AGC. The manual states to set TR1 so that you measure 1.1 volts at the hot pad of C43. I Get 1.4 volts. This does not worry me, but the manual implies the voltage at C43 should vary with the rotation of TR1. The 1.4 volts is steady throughout the range of TR1.

I have not heard a strong enough signal on 40meters with which to check the AGC, so I pumped a watt and a half out of my Heathkit HW-7 into a dummy load, and I was able to back the signal in the SS-40 down with TR1.

Does it sound like it is working properly?

Thanks for any opinions or advice.

John
WB6HVH

# 246. mvam109

Yahoo group: SS-40
Date: 2011-07-22 13:31:11 UTC
From: Ira B. Rothenhoefer
Topic: 246  Message: 246

Hi;

I noticed on the schematic that it calls for a mvam108. The
Assembly manual calls for a mvam109. I do have a 109 in the receiver.
The specs for the 108 is 12 volts and the 109 15 volts. Which is correct??

73

Barney

# 247. Re: [SS-40] mvam109

Yahoo group: SS-40
Date: 2011-07-22 13:40:34 UTC
From: Jim Kortge
Topic: 246  Message: 247

On 7/22/2011 9:31 AM, Ira B. Rothenhoefer wrote:
>
>
>
>
> Hi;
>
> I noticed on the schematic that it calls for a mvam108. The Assembly
> manual calls for a mvam109. I do have a 109 in the receiver. The specs
> for the 108 is 12 volts and the 109 15 volts. Which is correct??

The receiver uses a MVAM109, as that is the part we can get. Either
will work just fine, and eventually, I'll change the schematic to the
MVAM109 part. Actually, I think I did that and it probably hasn't
made it out to the web, but I'll have to go back and check.
>
> 73
>
> Barney
>

72,

Jim, K8IQY

# 248. AGC Question

Yahoo group: SS-40
Date: 2011-07-22 14:31:20 UTC
From: John
Topic: 246  Message: 248

Forgive me if this note posts twice. I sent it last night, but don't see that it went through.

I finished building the SS-40 and it seems to work as it should. The only odd thing I find is when it comes to setting the AGC. The manual states to set TR1 so that you measure 1.1 volts at the hot pad of C43. I Get 1.4 volts. This does not worry me, but the manual implies the voltage at C43 should vary with the rotation of TR1. The 1.4 volts is steady throughout the range of TR1.

I have not heard a strong enough signal on 40meters with which to check the AGC, so I pumped a watt and a half out of my Heathkit HW-7 into a dummy load, and I was able to back the signal in the SS-40 down with TR1. I am not sure if it is as it should be, but there is a notable difference.

Does it sound like it is working properly?

Thanks for any opinions or advice.

John
WB6HVH

# 249. Re: [SS-40] SS40

Yahoo group: SS-40
Date: 2011-07-22 18:02:32 UTC
From: Jim Kortge
Topic: 241  Message: 249

On 7/21/2011 10:20 PM, Ira B. Rothenhoefer wrote:
> Ok Jim;
>
> I appreciate that. I don't know if I can trace a signal backwards from
> the output, but will try and maybe I can find the problem. I am going
> to take another trip through the assembly manual and see if I really
> have all the parts in the right place.
>
> It does appear that I have all the right parts in the right places..

Do you have someone that can help you look at the images in the
Assembly Manual and your PCB. Another set of eyes can be very helpful.
>
> With my tuning range around 15 kc, what do I need to check besides the
> crystal ground in order to increase it??

Can't answer that. It could be a lot of things causing that problem.

Do you have the ability to take some good, in-focus, digital photos of
both sides of the PCB and send them to me? Maybe I can spot something
by doing that.

72,

Jim, K8IQY

# 250. Re: [SS-40] AGC Question

Yahoo group: SS-40
Date: 2011-07-22 18:07:19 UTC
From: Jim Kortge
Topic: 245  Message: 250

On 7/22/2011 2:32 AM, John wrote:
>
>
> I finished building the SS-40 and it seems to work as it should. The only
> odd thing I find is when it comes to setting the AGC. The manual states to
> set TR1 so that you measure 1.1 volts at the hot pad of C43. I Get 1.4
> volts. This does not worry me, but the manual implies the voltage at C43
> should vary with the rotation of TR1.

It will if there is a decent antenna connected to the rig while doing
the setting. Without any signal into the BNC connector, there will be
no AGC voltage. The signal can just be noise, but there has to be
something there.

The 1.4 volts is steady throughout
> the range of TR1.

Doesn't sound like the rig is receiving well. Do the front-end
filters all tune properly? You should hear two peaks as each
capacitive trimmer is turned through 360 degrees.
>
> I have not heard a strong enough signal on 40meters with which to check the
> AGC, so I pumped a watt and a half out of my Heathkit HW-7 into a dummy
> load, and I was able to back the signal in the SS-40 down with TR1.

That is encouraging.

>
> Does it sound like it is working properly?

Not sure. What you describe above should happen with the receiver
listening to band noise.
>
> Thanks for any opinions or advice.
>
> John
> WB6HVH

72,

Jim, K8IQY

# 251. Re: [SS-40] AGC Question

Yahoo group: SS-40
Date: 2011-07-22 18:52:23 UTC
From: john@all-the-facts.com
Topic: 245  Message: 251

Hey John,

I had exactly the same problem as you when I built my SS-40. No peaks on the band pass filters and no change in agc voltage. I must have read the instructions 10 times and kept missing the step of connecting an antenna!!!! It finally came to me that without an antenna on the radio there was NO signal to adjust.

73, John NS5Z

Bossier City, Louisiana
EM-32, QRP-ARCI, G-QRP, ARRL, RSGB
-----Original Message-----
From: Jim Kortge [mailto:jim.k8iqy@...]
Sent: Friday, July 22, 2011 01:07 PM
To: SS-40@yahoogroups.com
Cc: 'John'
Subject: Re: [SS-40] AGC Question

On 7/22/2011 2:32 AM, John wrote:
>
>
> I finished building the SS-40 and it seems to work as it should. The only
> odd thing I find is when it comes to setting the AGC. The manual states to
> set TR1 so that you measure 1.1 volts at the hot pad of C43. I Get 1.4
> volts. This does not worry me, but the manual implies the voltage at C43
> should vary with the rotation of TR1.

It will if there is a decent antenna connected to the rig while doing
the setting. Without any signal into the BNC connector, there will be
no AGC voltage. The signal can just be noise, but there has to be
something there.

The 1.4 volts is steady throughout
> the range of TR1.

Doesn't sound like the rig is receiving well. Do the front-end
filters all tune properly? You should hear two peaks as each
capacitive trimmer is turned through 360 degrees.
>
> I have not heard a strong enough signal on 40meters with which to check the
> AGC, so I pumped a watt and a half out of my Heathkit HW-7 into a dummy
> load, and I was able to back the signal in the SS-40 down with TR1.

That is encouraging.

>
> Does it sound like it is working properly?

Not sure. What you describe above should happen with the receiver listening to band noise.
>
> Thanks for any opinions or advice.
>
> John
> WB6HVH

72,

Jim, K8IQY

# 252. Re: [SS-40] SS40

Yahoo group: SS-40
Date: 2011-07-22 19:42:20 UTC
From: Ira B. Rothenhoefer
Topic: 241  Message: 252

Hi Jim;

My newest camera has a feature for close ups and I think I can get
it done....

I'll take the pictures first then see if I can find one of the
local hams to take a look at the board...thanks Jim. I reheated the
crystal strap on the ground. I'll recheck those connections and see
what happens....

73

Barney

On 7/22/2011 1:02 PM, Jim Kortge wrote:
>
> On 7/21/2011 10:20 PM, Ira B. Rothenhoefer wrote:
> > Ok Jim;
> >
> > I appreciate that. I don't know if I can trace a signal backwards from
> > the output, but will try and maybe I can find the problem. I am going
> > to take another trip through the assembly manual and see if I really
> > have all the parts in the right place.
> >
> > It does appear that I have all the right parts in the right places..
>
> Do you have someone that can help you look at the images in the
> Assembly Manual and your PCB. Another set of eyes can be very helpful.
> >
> > With my tuning range around 15 kc, what do I need to check besides the
> > crystal ground in order to increase it??
>
> Can't answer that. It could be a lot of things causing that problem.
>
> Do you have the ability to take some good, in-focus, digital photos of
> both sides of the PCB and send them to me? Maybe I can spot something
> by doing that.
>
> 72,
>
> Jim, K8IQY
>
>

# 253. Re: [SS-40] SS40

Yahoo group: SS-40
Date: 2011-07-22 23:35:25 UTC
From: Jim Kortge
Topic: 241  Message: 253

On 7/22/2011 3:42 PM, Ira B. Rothenhoefer wrote:
> Hi Jim;

Hi Barney,

>
> My newest camera has a feature for close ups and I think I can get it
> done....

You don't need to be close to the board, in fact, when I shoot photos
I'm 2 to 3 feet away and use some of the magnification from the lens
to get the project centered in the field of view. The way, the whole
field is in focus when the camera is stopped down (f/32). It might
take 2 seconds of the shutter being open to get the shot, but they are
always sharp and in focus that way. If you don't have good lights,
take it outside on the North side of the house and shoot in the shade
for more consistent lighting and no shadows.
>
> I'll take the pictures first then see if I can find one of the local
> hams to take a look at the board...thanks Jim. I reheated the crystal
> strap on the ground. I'll recheck those connections and see what
> happens....
>

Good show.....

> 73
>
> Barney
>

72,

Jim, K8IQY

# 254. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-23 01:38:23 UTC
From: Norm
Topic: 224  Message: 254

When I tried to adjust the VFO on my newly completed SS-40, I had absolutely no band adjustment at all.
I saw a spark under the VFO pot and in dim light, the pot element was giving off a rosy glow,
the only other similar pot I had was on my 2n20 xciver so I swapped them and what a great receiver.
It’s almost as good as my K3 (almost).
Thanks, Jim, for a nice reciever.

73, Norm

# 255. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-23 01:47:51 UTC
From: Norm
Topic: 224  Message: 255

When I tried to adjust the VFO on my newly completed SS-40, I had absolutely no band adjustment at all.
I saw a spark under the VFO pot and in dim light, the pot element was giving off a rosy glow,
the only other similar pot I had was on my 2n20 xciver so I swapped them and what a great receiver.
It’s almost as good as my K3 (almost).
Thanks, Jim, for a nice job.

73, Norm, k6uo

# 256. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-23 02:44:34 UTC
From: WA0ITP
Topic: 224  Message: 256

GE Norm,

Sri for the part problem, Was the pot from the 2N2/40 the 10k tuning pot? I will mail a replacement pot to you tomorrow.

Glad you like the receiver. It does play very well doesnt it,

---
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Norm
To: SS-40@yahoogroups.com
Sent: Friday, July 22, 2011 8:47 PM
Subject: Re: [SS-40] Re: SS40 crystals

When I tried to adjust the VFO on my newly completed SS-40, I had absolutely no band adjustment at all.
I saw a spark under the VFO pot and in dim light, the pot element was giving off a rosy glow,
the only other similar pot I had was on my 2n20 xciver so I swapped them and what a great receiver.
It’s almost as good as my K3 (almost).
Thanks, Jim, for a nice job.

73, Norm, k6uo

# 257. RE: [SS-40] AGC Question

Yahoo group: SS-40
Date: 2011-07-23 03:10:53 UTC
From: John
Topic: 245  Message: 257

Jim,

In answer to your comments below.

The antenna was connected. Is it a decent antenna? Well it's the only one I have, a dipole at 15 feet or so.
The front end seemed to tune okay, got the two peaks and I am hearing signals.
I believe the instructions said to do the AGC voltage check with the receiver not tuned on a signal, just the band noise. I'll have to double check that step.

-----Original Message-----
From: Jim Kortge [mailto:jim.k8iqy@...]
Sent: Friday, July 22, 2011 11:07 AM
To: SS-40@yahoogroups.com
Cc: John
Subject: Re: [SS-40] AGC Question

On 7/22/2011 2:32 AM, John wrote:
>
>
> I finished building the SS-40 and it seems to work as it should. The
> only odd thing I find is when it comes to setting the AGC. The manual
> states to set TR1 so that you measure 1.1 volts at the hot pad of C43.
> I Get 1.4 volts. This does not worry me, but the manual implies the
> voltage at C43 should vary with the rotation of TR1.

It will if there is a decent antenna connected to the rig while doing the setting. Without any signal into the BNC connector, there will be no AGC voltage. The signal can just be noise, but there has to be something there.

The 1.4 volts is steady throughout
> the range of TR1.

Doesn't sound like the rig is receiving well. Do the front-end filters all tune properly? You should hear two peaks as each capacitive trimmer is turned through 360 degrees.
>
> I have not heard a strong enough signal on 40meters with which to
> check the AGC, so I pumped a watt and a half out of my Heathkit HW-7
> into a dummy load, and I was able to back the signal in the SS-40 down
with TR1.

That is encouraging.

>
> Does it sound like it is working properly?

Not sure. What you describe above should happen with the receiver listening to band noise.

>
> Thanks for any opinions or advice.
>
> John
> WB6HVH

72,

Jim, K8IQY

# 258. RE: [SS-40] AGC Question

Yahoo group: SS-40
Date: 2011-07-23 03:14:15 UTC
From: John
Topic: 245  Message: 258

John,

I got the peaks when tweaking the trimmer caps, just no variance on the AGC voltage at that step. I'm sure I missed something somewhere :)

73,
John
WB6HVH

-----

From: john@... [mailto:john@...]
Sent: Friday, July 22, 2011 11:52 AM
To: SS-40@yahoogroups.com
Cc: John
Subject: Re: [SS-40] AGC Question

Hey John,

I had exactly the same problem as you when I built my SS-40. No peaks on the band pass filters and no change in agc voltage. I must have read the instructions 10 times and kept missing the step of connecting an antenna!!!! It finally came to me that without an antenna on the radio there was NO signal to adjust.

73, John NS5Z

Bossier City, Louisiana
EM-32, QRP-ARCI, G-QRP, ARRL, RSGB

-----Original Message-----
From: Jim Kortge [mailto:jim.k8iqy@...]
Sent: Friday, July 22, 2011 01:07 PM
To: SS-40@yahoogroups.com
Cc: 'John'
Subject: Re: [SS-40] AGC Question

On 7/22/2011 2:32 AM, John wrote:
>
>
> I finished building the SS-40 and it seems to work as it should. The only
> odd thing I find is when it comes to setting the AGC. The manual states to
> set TR1 so that you measure 1.1 volts at the hot pad of C43. I Get 1.4
> volts. This does not worry me, but the manual implies the voltage at C43
> should vary with the rotation of TR1.

It will if there is a decent antenna connected to the rig while doing the setting. Without any signal into the BNC connector, there will be

no AGC voltage. The signal can just be noise, but there has to be
something there.

The 1.4 volts is steady throughout
> the range of TR1.

Doesn't sound like the rig is receiving well. Do the front-end
filters all tune properly? You should hear two peaks as each
capacitive trimmer is turned through 360 degrees.
>
> I have not heard a strong enough signal on 40meters with which to check
the
> AGC, so I pumped a watt and a half out of my Heathkit HW-7 into a dummy
> load, and I was able to back the signal in the SS-40 down with TR1.

That is encouraging.

>
> Does it sound like it is working properly?

Not sure. What you describe above should happen with the receiver
listening to band noise.
>
> Thanks for any opinions or advice.
>
> John
> WB6HVH

72,

Jim, K8IQY

# 259. Re: [SS-40] Re: SS40 crystals

Yahoo group: SS-40
Date: 2011-07-23 19:35:00 UTC
From: Jim Kortge
Topic: 224  Message: 259

On 7/22/2011 9:38 PM, Norm wrote:
> When I tried to adjust the VFO on my newly completed SS-40, I had absolutely no band adjustment at all.
> I saw a spark under the VFO pot and in dim light, the pot element was giving off a rosy glow,
> the only other similar pot I had was on my 2n20 xciver so I swapped them and what a great receiver.
> It’s almost as good as my K3 (almost).
> Thanks, Jim, for a nice reciever.
>
> 73, Norm

Norm,

I'd say that if the pot element was glowing, there was a major short from the center pin to either end. That's the only mechanism the would light it up like that. The full supply voltage was across part of the pot, not the whole element. I might have been a faulty pot or a short on the PCB from soldering it in.

As for "almost as good as a K#", I can't comment on that, as I've not played with a K3. I'd sure be interested in hearing more comparisons to top end commercial rigs, especially if measurements are included too.

Thanks for the feedback and 72,

Jim, K8IQY

PS...I think Terry is sending you a replacement pot.

# 260. Re: [SS-40] AGC Question

Yahoo group: SS-40
Date: 2011-07-23 19:37:36 UTC
From: Jim Kortge
Topic: 245  Message: 260

On 7/22/2011 11:10 PM, John wrote:
> Jim,

Hi John,

>
> In answer to your comments below.
>
> The antenna was connected. Is it a decent antenna? Well it's the only one I
> have, a dipole at 15 feet or so.

That's plenty good enough!

> The front end seemed to tune okay, got the two peaks and I am hearing
> signals.

Good.....

> I believe the instructions said to do the AGC voltage check with the
> receiver not tuned on a signal, just the band noise.

yes, that is correct. Band noise works well for setting the AGC level
initially. You can trip it up a bit when there are strong signals on
the band.

I'll have to double
> check that step.

OK....good show.

72,

Jim, K8IQY

# 261. SS-40 Resistors

Yahoo group: SS-40
Date: 2011-07-25 01:59:22 UTC
From: fghester
Topic: 261  Message: 261

Me thinks these little five band, blue bodied resistor rascalions could be big trouble if this intermediate builder isn't VERY careful! Have slowed waaay down & carefully measuring each one with a digital ohm meter as it goes in. Is there a visual convention for knowing which band is the first band? vs. the last band? I love learning new stuff!! :-)

# 262. Re: [SS-40] SS-40 Resistors

Yahoo group: SS-40
Date: 2011-07-25 03:53:54 UTC
From: Ira B. Rothenhoefer
Topic: 261  Message: 262

Toward the back of the build manual is a description of the resistors.
The color bands and so forth..But measuring them with DVM is very good.

Barney

On 7/24/2011 8:59 PM, fghester wrote:
>
> Me thinks these little five band, blue bodied resistor rascalions
> could be big trouble if this intermediate builder isn't VERY careful!
> Have slowed waaay down & carefully measuring each one with a digital
> ohm meter as it goes in. Is there a visual convention for knowing
> which band is the first band? vs. the last band? I love learning new
> stuff!! :-)
>
>

# 263. Re: [SS-40] SS-40 Resistors

Yahoo group: SS-40
Date: 2011-07-25 16:25:53 UTC
From: Jim Kortge
Topic: 261  Message: 263

On 7/24/2011 9:59 PM, fghester wrote:
> Me thinks these little five band, blue bodied resistor rascalions could be big trouble if this intermediate builder isn't VERY careful! Have slowed waaay down& carefully measuring each one with a digital ohm meter as it goes in. Is there a visual convention for knowing which band is the first band? vs. the last band? I love learning new stuff!! :-)
>

Learning how to read metal film resistors is left as an exercise for the student! :-) I'm sure there is info out on the web, but using an Ohmmeter is a very safe way to do the job. Eventually, you will figure out the band coding.

72,

Jim, K8IQY

# 264. Re: help in connecting a DDS frequency generator to this super receiver so I can get all of 40 meters.

Yahoo group: SS-40
Date: 2011-08-30 18:11:48 UTC
From: Jim Kortge
Topic: 264  Message: 264

On 8/29/2011 4:52 PM, ber8@... wrote:
>
> Dear Jim,

Hi Barry,

>
> Many thanks for the directions. The DDS unit I have is a N3ZI model DDS2. It puts out 250 mV peak to peak and the impedience is 200 ohms.

I'd connect it to the VXO string at the location of C50 and C52. To do that, remove one lead of C50 so that the crystals are not connected through that 47 pF capacitor and connect the output of the DDS to the pad where C52 would be installed. You can then use the TR2 trim pot to set the drive level to the mixer. You want to have about 0.5 volts RMS on the LO port of the mixer to make it operate correctly. Another way to adjust the mixer drive is to tune in a signal and increase the setting of TR2 until the signal peaks and then give the pot another few percent more and call it good.

His site also includes a little DDS buffer amp which outputs at 50 ohms and generates about 3 volts peak to peak.

No, you should not need that. See above.

Should I plan to try the DDS unit without the buffer amp or plan to build a buffer amp before applying it to the SS-40?

Without the buffer amp should be fine. We'll do that buffering with the VXO amplifier string.

> Many thanks for your kind patience with me and I will be glad to take some pictures and forward them when I get the radio handshaking with the DDS unit.

Very good. Good luck in making it work. It should do just fine.

72,

Jim, K8IQY

# 265. No 60hz hum

Yahoo group: SS-40
Date: 2011-08-30 22:31:37 UTC
From: homebrewer7
Topic: 265  Message: 265

So after step three where you do the test on R21 to get the hum and to test the volume I get no hum. It produces a static sound momentarly. This statis sound goes up and down with the volume (VR1).

I reflowed all the joints just to make sure. Any ideas what could be causing this? Is it the chip? The voltage tests from the step before are spot on.

Thanks and take care,
Dave, KD2AKC

# 266. Re: No 60hz hum

Yahoo group: SS-40
Date: 2011-08-31 02:24:56 UTC
From: homebrewer7
Topic: 265  Message: 266

Hah, so after rechecking things I'm an idiot and apparently in the middle of the night last night saw a yellow band as a gold one ;)

Problem solved.

Dave

--- In SS-40@yahoogroups.com, "homebrewer7" <moneycraft@...> wrote:
>
> So after step three where you do the test on R21 to get the hum and to test the volume I get no hum. It produces a static sound momentarly. This statis sound goes up and down with the volume (VR1).
>
> I reflowed all the joints just to make sure. Any ideas what could be causing this? Is it the chip? The voltage tests from the step before are spot on.
>
> Thanks and take care,
> Dave, KD2AKC
>

# 267. Re: [SS-40] Re: No 60hz hum

Yahoo group: SS-40
Date: 2011-08-31 23:44:56 UTC
From: Jim Kortge
Topic: 265  Message: 267

On 8/30/2011 10:24 PM, homebrewer7 wrote:
>
> Hah, so after rechecking things I'm an idiot and apparently in the middle of the night last night saw a yellow band as a gold one ;)
>
> Problem solved.
>
> Dave
>
>
> --- In SS-40@yahoogroups.com, "homebrewer7"<moneycraft@...> wrote:
>>
>> So after step three where you do the test on R21 to get the hum and to test the volume I get no hum. It produces a static sound momentarly. This statis sound goes up and down with the volume (VR1).
>>
>> I reflowed all the joints just to make sure. Any ideas what could be causing this? Is it the chip? The voltage tests from the step before are spot on.
>>
>> Thanks and take care,
>> Dave, KD2AKC
>>

OK Dave,

Thanks for the update. Glad you found it yourself.

72,

Jim, K8IQY

# 268. Re: No 60hz hum

Yahoo group: SS-40
Date: 2011-09-01 15:10:03 UTC
From: homebrewer7
Topic: 265  Message: 268

Thanks Jim,

Yeah I decided against any more late night building in dim light in general. BTW, the board for the ss-40 is very nice.

I want to have the antenna, phones and mute line on the otherside of the eventual case (tp-41) from the tuning and gain knobs. So they're on the side with the DC plug. Do you see any drawback to coaxing them to the board from case mount jacks? Keep the antenna isolated so it doesn't ground until the board?

I'm going to wait until I'm done with the receiver to make said modification but am curious as to anyones input.

Take care,
Dave, KD2AKC

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 8/30/2011 10:24 PM, homebrewer7 wrote:
> >
> > Hah, so after rechecking things I'm an idiot and apparently in the middle of the night last night saw a yellow band as a gold one ;)
> >
> > Problem solved.
> >
> > Dave
> >
> >
> > --- In SS-40@yahoogroups.com, "homebrewer7"<moneycraft@> wrote:
> >>
> >> So after step three where you do the test on R21 to get the hum and to test the volume I get no hum. It produces a static sound momentarly. This statis sound goes up and down with the volume (VR1).
> >>
> >> I reflowed all the joints just to make sure. Any ideas what could be causing this? Is it the chip? The voltage tests from the step before are spot on.
> >>
> >> Thanks and take care,
> >> Dave, KD2AKC
> >>
>
> OK Dave,
>
> Thanks for the update. Glad you found it yourself.
>
> 72,

>
> Jim, K8IQY
>

# 269. Re: [SS-40] Re: No 60hz hum

Yahoo group: SS-40
Date: 2011-09-01 15:36:17 UTC
From: Martin / K0BXB
Topic: 265  Message: 269

Hi Dave,

I am using some RG-174 (or whatever it is) to do just what you want to do. No problem that I can see. I think I'll do the same with My Magic Box. it is pretty messy having those connectors on the front panel.

73 Martin K0BXB

From: homebrewer7
Sent: Thursday, September 01, 2011 10:10 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] Re: No 60hz hum

Thanks Jim,

Yeah I decided against any more late night building in dim light in general. BTW, the board for the ss-40 is very nice.

I want to have the antenna, phones and mute line on the otherside of the eventual case (tp-41) from the tuning and gain knobs. So they're on the side with the DC plug. Do you see any drawback to coaxing them to the board from case mount jacks? Keep the antenna isolated so it doesn't ground until the board?

I'm going to wait until I'm done with the receiver to make said modification but am curious as to anyones input.

Take care,
Dave, KD2AKC

--- In mailto:SS-40%40yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 8/30/2011 10:24 PM, homebrewer7 wrote:
> >
> > Hah, so after rechecking things I'm an idiot and apparently in the middle of the night last night saw a yellow band as a gold one ;)
> >
> > Problem solved.
> >
> > Dave
> >
> >
> > --- In mailto:SS-40%40yahoogroups.com, "homebrewer7"<moneycraft@> wrote:
> >>
> >> So after step three where you do the test on R21 to get the hum and to test the volume I get no hum. It produces a static sound momentarly. This statis sound goes up and down with the volume (VR1).
> >>

> >> I reflowed all the joints just to make sure. Any ideas what could be causing this? Is it the chip? The voltage tests from the step before are spot on.
> >>
> >> Thanks and take care,
> >> Dave, KD2AKC
> >>
>
> OK Dave,
>
> Thanks for the update. Glad you found it yourself.
>
> 72,
>
> Jim, K8IQY
>

# 270. Yipee!

Yahoo group: SS-40
Date: 2011-09-01 21:23:25 UTC
From: fghester
Topic: 270  Message: 270

Smoke test at the end of step 9 (post mixer amplifier) A-O.K. On to the VXO (step 10). Still going slow and only work an hour at a sitting. Otherwise I get tired and do dumb stuff :-/ Woody/WD9F

# 271. Re: [SS-40] Yipee!

Yahoo group: SS-40
Date: 2011-09-02 04:33:01 UTC
From: Donald Goffinet
Topic: 270  Message: 271

For checking  parts, I suggest having a LCR meter.  I just got a new model DM4070 on eBay for $33.
It works good and has a large LCD display.  I am also building a SS-40 now.
73 Don  KE8DO

From: fghester <fghester@...>
To: SS-40@yahoogroups.com
Sent: Thursday, September 1, 2011 5:23 PM
Subject: [SS-40] Yipee!

Smoke test at the end of step 9 (post mixer amplifier) A-O.K. On to the VXO (step 10). Still going slow and only work an hour at a sitting. Otherwise I get tired and do dumb stuff :-/ Woody/WD9F

# 272. SS-40 finished, up and running, AWESOME!

Yahoo group: SS-40
Date: 2011-09-03 00:06:02 UTC
From: fghester
Topic: 272  Message: 272

Wow! I lacked the fancy gear for the last few smoke tests so went on without doing them and held my breath. Amazingly it fired right up and was real easy to align (using only my ears). Thanks Jim, Terry and the gang and who ever put the kit together. All parts were there and nothing left over... Build directions were awesome too! Now, for a NS40 / Magic Box / SS40 Q! / Woody / WD9F

# 273. Re: SS-40 finished, up and running, AWESOME!

Yahoo group: SS-40
Date: 2011-09-03 01:28:48 UTC
From: fghester
Topic: 272  Message: 273

p.s. got the Q. W3GIS / Ron in Rockville, Md. One state down, 49 to go :-)

--- In SS-40@yahoogroups.com, "fghester" <fghester@...> wrote:
>
> Wow! I lacked the fancy gear for the last few smoke tests so went on without doing them and held my breath. Amazingly it fired right up and was real easy to align (using only my ears). Thanks Jim, Terry and the gang and who ever put the kit together. All parts were there and nothing left over... Build directions were awesome too! Now, for a NS40 / Magic Box / SS40 Q! / Woody / WD9F
>

# 274. RE: [SS-40] Re: SS-40 finished, up and running, AWESOME!

Yahoo group: SS-40
Date: 2011-09-03 02:33:57 UTC
From: Dale Putnam
Topic: 272  Message: 274

I knew you could do it Woody, and it will provide a whole lotta fun too. Aside from the amount of pride that you did it!!
Have a great day,

--... ...-- Dale - WC7S in Wy

To: SS-40@yahoogroups.com
From: fghester@yahoo.com
Date: Sat, 3 Sep 2011 01:28:48 +0000
Subject: [SS-40] Re: SS-40 finished, up and running, AWESOME!

p.s. got the Q. W3GIS / Ron in Rockville, Md. One state down, 49 to go :-)

--- In SS-40@yahoogroups.com, "fghester" <fghester@...> wrote:
>
> Wow! I lacked the fancy gear for the last few smoke tests so went on without doing them and held my breath. Amazingly it fired right up and was real easy to align (using only my ears). Thanks Jim, Terry and the gang and who ever put the kit together. All parts were there and nothing left over... Build directions were awesome too! Now, for a NS40 / Magic Box / SS40 Q! / Woody / WD9F
>

# 275. Using a DDS with the SS-40

Yahoo group: SS-40
Date: 2011-09-06 18:02:27 UTC
From: Martin / K0BXB
Topic: 265  Message: 275

I have been using the WA1FFL Direct-Digital VFO with my SS-40 for a while now. It works well. Today I installed a switch on the back panel of my SS-40 so I can select either the internal VXO or my external VFO. To install the switch I lifted the output end of C50 (47pf) cap and ran it to one pole of a SPST slide switch. I connected the other pole of the switch to a 47pf cap coming from an RCA phono jack to which I connect to the VFO using an audio cable. The switch wiper connects to the base of Q7 where C50 was lifted. I used a four wire piece off an old computer hard drive cable to make the connections – the fourth wire being ground. As nearly as I can tell the receiver works well with either the internal VXO or the external VFO. I have not needed to change the 1K mixer drive pot (TR2) setting. For the record, I also have moved the antenna connector to the back panel using a short piece of RG174 coax. That too seems to be working fine. Nice little receiver.
Martin K0BXB

# 276. Yee-Haw

Yahoo group: SS-40
Date: 2011-09-12 17:44:39 UTC
From: Arthur
Topic: 276  Message: 276

Yee-Haw---just ordered my SS-40 kit. Now I have to restrain my enthusiasm till it gets here! I am going to order 1 kit at a time and then the 3 TenTec enclosures so I have the complete set. Does anyone know where to get a set of letter (or word) decals for the front and rear of cases? 73 Art KJ4KBP

# 277. IP3 data?

Yahoo group: SS-40
Date: 2011-09-14 15:13:32 UTC
From: Peter
Topic: 277  Message: 277

Hello Everyone,

I am just wondering if anyone has measured the IP3 performance of the receiver. That data is not provided among the specs.
Would be interesting to see how the SS-40 measures up.

Regards, Peter

# 278. Steve Weber - Digital Dial??

Yahoo group: SS-40
Date: 2011-09-14 17:02:17 UTC
From: fghester
Topic: 278  Message: 278

Has anyone successfully used Steve Weber's digital dial for the SS-40? (as sold on QRP.Com). Opinions about how well it would work and where best to connect it? / Woody / WD9F

# 279. Re: [SS-40] Steve Weber - Digital Dial??

Yahoo group: SS-40
Date: 2011-09-14 17:48:19 UTC
From: WA0ITP
Topic: 278  Message: 279

I haven't heard of any Woody, but it should work just fine.

For single turn tuning rigs I have used a numerical dial lijke this one http://www.wa0itp.com/mas80.html along with a cal chart like this http://www.wa0itp.com/tut80calchart.xls It's entirely adequate.

Nice working you the other day on your Four State station.
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "fghester" <fghester@...>
To: <SS-40@yahoogroups.com>
Sent: Wednesday, September 14, 2011 12:02 PM
Subject: [SS-40] Steve Weber - Digital Dial??

| Has anyone successfully used Steve Weber's digital dial for the SS-40? (as sold on QRP.Com). Opinions about how well it would work and where best to connect it? / Woody / WD9F
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 280. Re: Steve Weber - Digital Dial??

Yahoo group: SS-40
Date: 2011-09-14 18:13:27 UTC
From: wg6h
Topic: 278  Message: 280

I have not completed building my SS-40 yet so I will have to get back to you after I give the digital dial hook up a try. I believe a simple FET buffer stage would allow picking off the LO signal at or near the output stage and not cause any signal level loading problems.

Yesterday I was lucky enough to find a nice 5K ten-turn pot in my junk box so the digital dial will be useful for me. The ten-turn pot is probably overkill with the approximate 25 kHz of band coverage of the SS-40 but I like receivers with fine tuning.

72/73,
Bill - K6WLM

--- In SS-40@yahoogroups.com, "
fghester" <fghester@...> wrote:
>
> Has anyone successfully used Steve Weber's digital dial for the SS-40? (as sold on QRP.Com). Opinions about how well it would work and where best to connect it? / Woody / WD9F
>

# 281. Re: [SS-40] Steve Weber - Digital Dial??

Yahoo group: SS-40
Date: 2011-09-14 20:42:37 UTC
From: O. Alan Jones
Topic: 278  Message: 281

Hi Terry,
How are you creating your nice front panel labels?
Your front panels look great.

O. Alan Jones

--
N8WQ - Canal Winchester, Ohio
CompTIA: A+ Certified Professional

On 9/14/2011 1:48 PM, WA0ITP wrote:
>
> I haven't heard of any Woody, but it should work just fine.
>
> For single turn tuning rigs I have used a numerical dial lijke this
> one http://www.wa0itp.com/mas80.html along with a cal chart like
> this http://www.wa0itp.com/tut80calchart.xls It's entirely
> adequate.
>
> Nice working you the other day on your Four State station.
> ---
> I love this radio stuff !
> 72, 73 Terry, WA?ITP
> wa0itp@... <mailto:wa0itp%40wa0itp.com>
> www.wa0itp.com
> www.4sqrp.com
> www.qrpspots.com
>
> ----- Original Message -----
> From: "fghester" <fghester@... <mailto:fghester%40yahoo.com>>
> To: <SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>>
> Sent: Wednesday, September 14, 2011 12:02 PM
> Subject: [SS-40] Steve Weber - Digital Dial??
>
> | Has anyone successfully used Steve Weber's digital dial for the
> SS-40? (as sold on QRP.Com). Opinions about how well it would work and
> where best to connect it? / Woody / WD9F
> |
> |
> |
> | ---
> |
> | Yahoo! Groups Links
> |
> |
> |

>
>

# 282. Re: SS-40 Resistors

Yahoo group: SS-40
Date: 2011-09-16 15:33:33 UTC
From: Peter
Topic: 261  Message: 282

The 2.2K resistor color code is given incorrectly, the proper code is:
Red Red Black Brown Brown

Peter

--- In SS-40@yahoogroups.com, "Ira B. Rothenhoefer" <barneyro@...> wrote:
>
> Toward the back of the build manual is a description of the resistors.
> The color bands and so forth..But measuring them with DVM is very good.
>
> Barney
>
> On 7/24/2011 8:59 PM, fghester wrote:
> >
> > Me thinks these little five band, blue bodied resistor rascalions
> > could be big trouble if this intermediate builder isn't VERY careful!
> > Have slowed waaay down & carefully measuring each one with a digital
> > ohm meter as it goes in. Is there a visual convention for knowing
> > which band is the first band? vs. the last band? I love learning new
> > stuff!! :-)
> >
> >
>

# 283. Ai2H DDS Conversion

Yahoo group: SS-40
Date: 2011-09-22 12:32:20 UTC
From: WA0ITP
Topic: 283  Message: 283

Barry Ryan, AI2H has successfully added a DDS VFO to his SS-40. Photos and a pdf file with details have been uploaded to the SS-40 Photo Page. http://www.wa0itp.com/ss40photopage.html

To see a close up of the pictures or to fit a page to your monitor screen, hold down the cntrl key and roll your mouse's scroll wheel.

Thanx to Jim for coaching Barry, and thanks to Barry for allowing me to display his comments and results

---

I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

# 284. My Build

Yahoo group: SS-40
Date: 2011-09-22 18:46:34 UTC
From: ab7kt@att.net
Topic: 284  Message: 284

I just found this group today and read through the posts.

I finished my receiver a few weeks back. I do have a couple issues that maybe I can get some help with. Let me state from the onset that I only have the vaguest idea of what I am doing. I am not an electronics technician. For what it's worth, I am a high school educated fireman. I point this out because I was laughed off another Yahoo group after asking a stupid question. I build these kinds of things, just hacking my way through trying to learn something. If you need to breach a concrete wall with a sledge hammer, that is more in line with my education and experience (yes, I have been called upon to do this more than once).

Ok, so, I put the kit together with only a few minor problems. My kit was missing quite a few parts. Like six. I had a few of them in my junk box. Twice I had to ask for replacement parts because I didn't have them and neither did the local Radio Shack. Not sure what happened there.

I don't own any test equipment other than an old Simpson 260 meter, so on some of the steps I just skipped the test proceedure. On the tests that I could perform, everything seemed fine. I finished it up and was instantly receiving signals on the appropriate step.

When tuning up the front end by ear, TC1 and TC3 didn't sound like they did anything. TC2 did make a big difference. I don't know if I got two peaks but I definitely got a nice sharp peak. I then took my reciever over to a local ham's house that has real test gear and this confirmed that TC1 and TC3 do nothing.

The other problem I have is the audio output. From reading the posts on this forum, I think I have a problem. Using a set of headphones from an iPod, I have the volume cranked all the way up to achieve a comfortable volume. I plugged a speaker into it and I couldn't hear a thing over the normal shack noise. Prior to now, I assumed this was normal but appearently it isn't.

The other problem I have is sort of off topic. I simply can't put something like this in a case and have all the holes line up. I ruined a Ten Tec enclosure trying. I got the Magic Box in an enclosure with only one noticable over-sized hole which I can live with, but the receiver looked like a three year old did it (or me). I have had the Magic Box without a case for like a year simply because I was scared to even try putting it in an enclosure and having everything line up.
I have ordered another kit and am going to keep all the controls and jacks off the board so I can mount them on the case without having to precisely line up five holes. I also don't like the antenna connector on the front and the lack of an on-off switch.
My hat is off to you guys that posted pictures of your rigs. They look great. Unlike mine.

Ken
AB7KT

# 285. RE: [SS-40] My Build

Yahoo group: SS-40
Date: 2011-09-22 19:41:17 UTC
From: Paul Playford
Topic: 284  Message: 285

First, thank you for you work as a first responder. (that's it for me being politically correct :)

Second, there are no dumb questions, just stupid answers.

It's been a couple of months since I commissioned my SS-40 but I do not recall any departures from the instructions, other than missing 6 components that were supplied by WA0ITP.

I do get noise on a little speaker on my SS-40, but not nearly as loud as on an earphone. How about trying a different speaker?

It could be that you need a decent antenna (half wave dipole, etc) or a signal generator for adjusting TC1, TC2 & TC3. I live in Phoenix and if you want I can take a look at your SS-40. It would be nice if you could come along with the radio so you would know what I do and how I do it.

I measured the Minimum Discernable Noise on my SS-40 and it is very, very good. It compares very favorably with my IC-756PROII and FT-1000D. So time spent getting your radio working will be well spent.

There is a combined front and rear panel drill template at:
http://www.wa0itp.com/ss40tp41drilltemplate.pdf

It sounds like you are having fun and that is very important in our hobby. A little frustration, mixed with a liberal dose of success is what it's all about.

de Paul, W8AEF

ZF2JI/ZF2TA FO8DX/FO8PLA 8Q7AA XZ0A VU7RG/VU3PYM TX5C A52PP

-----Original Message-----
From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of ab7kt@...
Sent: Thursday, September 22, 2011 11:47 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] My Build

I just found this group today and read through the posts.

I finished my receiver a few weeks back. I do have a couple issues that maybe I can get some help with. Let me state from the onset that I only have the vaguest idea of what I am doing. I am not an electronics technician. For what it's worth, I am a high school educated fireman. I point this out because I was laughed off another Yahoo group after asking a stupid question. I build these kinds of things, just hacking my way through trying to learn something. If you need to breach a concrete wall with a sledge

hammer, that is more in line with my education and experience (yes, I have been called upon to do this more than once).

Ok, so, I put the kit together with only a few minor problems. My kit was missing quite a few parts. Like six. I had a few of them in my junk box. Twice I had to ask for replacement parts because I didn't have them and neither did the local Radio Shack. Not sure what happened there.

I don't own any test equipment other than an old Simpson 260 meter, so on some of the steps I just skipped the test proceedure. On the tests that I could perform, everything seemed fine. I finished it up and was instantly receiving signals on the appropriate step.

When tuning up the front end by ear, TC1 and TC3 didn't sound like they did anything. TC2 did make a big difference. I don't know if I got two peaks but I definitely got a nice sharp peak. I then took my reciever over to a local ham's house that has real test gear and this confirmed that TC1 and TC3 do nothing.

The other problem I have is the audio output. From reading the posts on this forum, I think I have a problem. Using a set of headphones from an iPod, I have the volume cranked all the way up to achieve a comfortable volume. I plugged a speaker into it and I couldn't hear a thing over the normal shack noise. Prior to now, I assumed this was normal but appearently it isn't.

The other problem I have is sort of off topic. I simply can't put something like this in a case and have all the holes line up. I ruined a Ten Tec enclosure trying. I got the Magic Box in an enclosure with only one noticable over-sized hole which I can live with, but the receiver looked like a three year old did it (or me). I have had the Magic Box without a case for like a year simply because I was scared to even try putting it in an enclosure and having everything line up.
I have ordered another kit and am going to keep all the controls and jacks off the board so I can mount them on the case without having to precisely line up five holes. I also don't like the antenna connector on the front and the lack of an on-off switch.
My hat is off to you guys that posted pictures of your rigs. They look great. Unlike mine.

Ken
AB7KT

---

Yahoo! Groups Links

# 286. Re: My Build

Yahoo group: SS-40
Date: 2011-09-22 20:13:31 UTC
From: Stephen Farthing
Topic: 284  Message: 286

Ken,

If it works first time you have learned that you can solder and follow instructions. You learn far more when things don't work and you have to fix the problem.... Things to check are :-

a) are the right parts in the right place connected the right way round?

b) are the joints well soldiered? Check this using a magnifying glass. Sometimes a joint looks good to the naked eye but you can see errors with a glass. This is especially true for magnet wire as used to wind toroids. You really have to take care to clean and tin the wire properly before soldering it to the board. My first kit was a Norcal 40A. It was deaf as a post....took me ages to find the the problem which was a poor magnet wire joint.

I always find that planning the case before building the PCB is a good thing. Use a cardboard copy the same size as the case you are going to use. Then you can drill the card and find out where the holes etc should go before you cut metal. You can use "blue tack" to position the control components on the PCB before you build the board to help you do this. You also need to think about things that you need which may not be on the PCB or you want different, e.g choice of antenna connector (BNC, 259, N etc), power connector.

Hope this helps, and well done. May you build many more projects.

73s Steve G0XAR

--
It is vain to do with more that which can be done with less.

# 287. Re: My Build

Yahoo group: SS-40
Date: 2011-09-22 22:03:15 UTC
From: ab7kt@att.net
Topic: 284  Message: 287

Paul:
I thank you for your offer. As I mentioned in my original post, I took my receiver over to a local ham's house and used his signal generator, scope, AC voltmeter etc. We both looked the rig over for several hours and couldn't find any obvious issues with it. It seems to work fine. I am very happy with it.

But, as good as it works, there is obviously a problem with the fact that those two capacitors don't do anything and I am not getting as much audio as others seem to be getting. In fact, if I hadn't logged onto this group, I might have assumed that there was nothing wrong with it. It plays wonderfully.

No need to thank me for being a first responder: the taxpayers do that every two weeks. Again, I only mentioned that to show that I am not much of an electronics guy. I had someone answer me in another group by starting off mentioning that he had over 30 years of experience as an electronics technician. To which, I answered that I had zero: that is why I was on here asking questions :)

Ken
AB7KT

# 288. Re: [SS-40] My Build

Yahoo group: SS-40
Date: 2011-09-22 22:54:44 UTC
From: Ira B. Rothenhoefer
Topic: 284  Message: 288

Hi Ken;

Welcome to the list. I think you will like it here.

I had some problems with the two binocular coils with their orientation. And also with the insulation on them. Ditto the L1 and L4 toroids. the insulation wasn't all off. That affected the signal strength and operation of the TC1, TC2 and TC3. Hope I have all the numbers right. I had also forgotten to solder one end of a resistor.....

73

Barney/NO0N

On 9/22/2011 1:46 PM, ab7kt@... wrote:
>
> I just found this group today and read through the posts.
>
> I finished my receiver a few weeks back. I do have a couple issues
> that maybe I can get some help with. Let me state from the onset that
> I only have the vaguest idea of what I am doing. I am not an
> electronics technician. For what it's worth, I am a high school
> educated fireman. I point this out because I was laughed off another
> Yahoo group after asking a stupid question. I build these kinds of
> things, just hacking my way through trying to learn something. If you
> need to breach a concrete wall with a sledge hammer, that is more in
> line with my education and experience (yes, I have been called upon to
> do this more than once).
>
> Ok, so, I put the kit together with only a few minor problems. My kit
> was missing quite a few parts. Like six. I had a few of them in my
> junk box. Twice I had to ask for replacement parts because I didn't
> have them and neither did the local Radio Shack. Not sure what
> happened there.
>
> I don't own any test equipment other than an old Simpson 260 meter, so
> on some of the steps I just skipped the test proceedure. On the tests
> that I could perform, everything seemed fine. I finished it up and was
> instantly receiving signals on the appropriate step.
>
> When tuning up the front end by ear, TC1 and TC3 didn't sound like
> they did anything. TC2 did make a big difference. I don't know if I
> got two peaks but I definitely got a nice sharp peak. I then took my
> reciever over to a local ham's house that has real test gear and this
> confirmed that TC1 and TC3 do nothing.
>

> The other problem I have is the audio output. From reading the posts
> on this forum, I think I have a problem. Using a set of headphones
> from an iPod, I have the volume cranked all the way up to achieve a
> comfortable volume. I plugged a speaker into it and I couldn't hear a
> thing over the normal shack noise. Prior to now, I assumed this was
> normal but appearently it isn't.
>
> The other problem I have is sort of off topic. I simply can't put
> something like this in a case and have all the holes line up. I ruined
> a Ten Tec enclosure trying. I got the Magic Box in an enclosure with
> only one noticable over-sized hole which I can live with, but the
> receiver looked like a three year old did it (or me). I have had the
> Magic Box without a case for like a year simply because I was scared
> to even try putting it in an enclosure and having everything line up.
> I have ordered another kit and am going to keep all the controls and
> jacks off the board so I can mount them on the case without having to
> precisely line up five holes. I also don't like the antenna connector
> on the front and the lack of an on-off switch.
> My hat is off to you guys that posted pictures of your rigs. They look
> great. Unlike mine.
>
> Ken
> AB7KT
>
>

# 289. RE: [SS-40] Re: My Build

Yahoo group: SS-40
Date: 2011-09-23 01:49:19 UTC
From: Paul Playford
Topic: 284  Message: 289

We sometimes forget that everyone has to start somewhere. I was a drafter for a surveyor, then worked for a telephone company and from there went into two-way radio repair and broadcast television maintenance.

Electronic repair was a wonderful vocation for me and now amateur radio is a wonderful avocation.

Please don't be ashamed by not being able to pass your hand over a radio and have it come to life because not many of us can.

De Paul, W8AEF

-----Original Message-----
From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of ab7kt@...
Sent: Thursday, September 22, 2011 3:03 PM
To: SS-40@yahoogroups.com
Subject: [SS-40] Re: My Build

Paul:
I thank you for your offer. As I mentioned in my original post, I took my receiver over to a local ham's house and used his signal generator, scope, AC voltmeter etc. We both looked the rig over for several hours and couldn't find any obvious issues with it. It seems to work fine. I am very happy with it.

But, as good as it works, there is obviously a problem with the fact that those two capacitors don't do anything and I am not getting as much audio as others seem to be getting. In fact, if I hadn't logged onto this group, I might have assumed that there was nothing wrong with it. It plays wonderfully.

No need to thank me for being a first responder: the taxpayers do that every two weeks. Again, I only mentioned that to show that I am not much of an electronics guy. I had someone answer me in another group by starting off mentioning that he had over 30 years of experience as an electronics technician. To which, I answered that I had zero: that is why I was on here asking questions :)

Ken
AB7KT

---

Yahoo! Groups Links

# 290. Build--Ten Tec Enclosure

Yahoo group: SS-40
Date: 2011-09-23 17:42:46 UTC
From: Philip Cala-Lazar
Topic: 290  Message: 290

Ken,

I built mine into the suggested Ten Tec TP-41 enclosure. At first it would not fit, i.e., I could not angle the PCB sufficiently into the chassis before it jammed. The drilling template was used for layout and a Dremel drill press to perform the task.

All went well after enlarging the holes for the potentiometer shafts from the indicated 1/4” to 5/16”.

Also enlarged was the power jack opening to 1/2" to accommodate the power plug from the regulated wall wart used with my SS-40.

Photos of my SS-40 located in the group's photo section in the K9PL folder.

GL

73,

Philip, K9PL

A-1 Op - FISTS #6753 - SKCC #258T - NAQCC #2227 - CWops #308 - CTC #2206 - JA A-1 #509

# 291. WD9F response to Ken's post

Yahoo group: SS-40
Date: 2011-09-23 18:43:22 UTC
From: Woody Hester
Topic: 291  Message: 291

Hey Ken.  Even though I live in Illinois, I'm surprised you couldn't hear me cheering as I read your post.  You are soooooo like me.  My education and background is not technical and I'm just a hobbyist.  But I will tell you this.  The guys on this list and all the rest of the guys who make up the 4SQRP Group have just been awesome Elmers for me.  While I have tinkered with building for years, it's only recently that I've jumped in with both feet.  You can't ask a question that's too dumb here.  Heaven knows I've tested that!  The really cool thing is people nearly adopt you when you do ask questions / need help.  I'm not the right guy to advise you about your problems but I did want you to know there are at least two of us like you!!  As for enclosures, I can't do that either but I don't care.  Take a look at my 4SQRP station pictured at 4SQRP.Com (click on the hot button toward the middle of the Home Page).  It works like a champ with no
enclosures at all and I just put a towel over it when not in use to protect it from dust.  My friends have been more impressed with it like it is than they would be if it was in little boxes with knobs.  All the best my friend.  Enjoy the journey! / Woody

# 292. awesome receiver

Yahoo group: SS-40
Date: 2011-09-23 18:45:35 UTC
From: kb4qnr
Topic: 292  Message: 292

Hello all. I am very impressed with this receiver! Mine arrived earlier this week and I am really enjoying it. I am visually impaired so I had asked Larry AE4LD if he would do the build for me. He said that he would be happy to and also offered to build the NS-40 xmitter for me. Larry is very skilled at kit building and I would rate his work as A+. I had both units back within a week. I would like to thank Larry very much for giving me the chance to enjoy these qrp kits.
73 de kb4qnr.
Bobby Rolph
Lexington,Ky.

# 293. awesome receiver

Yahoo group: SS-40
Date: 2011-09-23 18:45:43 UTC
From: kb4qnr
Topic: 292  Message: 293

Hello all. I am very impressed with this receiver! Mine arrived earlier this week and I am really enjoying it. I am visually impaired so I had asked Larry AE4LD if he would do the build for me. He said that he would be happy to and also offered to build the NS-40 xmitter for me. Larry is very skilled at kit building and I would rate his work as A+. I had both units back within a week. I would like to thank Larry very much for giving me the chance to enjoy these qrp kits.
73 de kb4qnr.
Bobby Rolph
Lexington,Ky.

# 294. Re: [SS-40] WD9F response to Ken's post

Yahoo group: SS-40
Date: 2011-09-24 03:56:03 UTC
From: Ken Gilcrest
Topic: 291  Message: 294

I fixed the audio problem.
And it was a stupid mistake.
I got shorted 6 parts in my kit. In the audio amp stage, I was missing a capacitor and I just kept going. I set the board askide for awhile (weeks) to look at it with fresh eyes. The minute I pick it up I say.....what about C34 ????
I install it and I am now driving a speaker. It isn't loud, but it works. If I didn't have two fans blowing in the shack I wouldn't have to strain to hear it.

This is something I learned long ago. When I have a problem and I can't figure out the solution, I just get up and do something else. It might be days or weeks later the answer becomes crystal clear. Driving to work has enabled me to solve countless problems :) The shower is good too.

SUCCESS !!!!!!

Now moving on to the front end problem.....

Thanks for your thoughts.

Ken
AB7KT

----- Original Message -----
From: Woody Hester
To: SS-40@yahoogroups.com
Sent: Friday, September 23, 2011 11:43 AM
Subject: [SS-40] WD9F response to Ken's post

Hey Ken. Even though I live in Illinois, I'm surprised you couldn't hear me cheering as I read your post. You are soooooo like me. My education and background is not technical and I'm just a hobbyist. But I will tell you this. The guys on this list and all the rest of the guys who make up the 4SQRP Group have just been awesome Elmers for me. While I have tinkered with building for years, it's only recently that I've jumped in with both feet. You can't ask a question that's too dumb here. Heaven knows I've tested that! The really cool thing is people nearly adopt you when you do ask questions / need help. I'm not the right guy to advise you about your problems but I did want you to know there are at least two of us like you!! As for enclosures, I can't do that either but I don't care. Take a look at my 4SQRP station pictured at 4SQRP.Com (click on the hot button toward the middle of the Home Page). It works like a champ with no enclosures at all and I just put a towel over it when not in use to protect it from dust. My friends have been more impressed with it like it is than they would be if it was in little boxes with knobs. All the best my friend. Enjoy the journey! / Woody

---

No virus found in this message.
Checked by AVG - www.avg.com

Version: 10.0.1410 / Virus Database: 1520/3914 - Release Date: 09/23/11

# 295. Re: [SS-40] My Build

Yahoo group: SS-40
Date: 2011-09-24 22:38:28 UTC
From: Jim Kortge
Topic: 284  Message: 295

On 9/22/2011 2:46 PM, ab7kt@... wrote:
> I just found this group today and read through the posts.
>
> I finished my receiver a few weeks back. I do have a couple issues that maybe I can get some help with. Let me state from the onset that I only have the vaguest idea of what I am doing. I am not an electronics technician. For what it's worth, I am a high school educated fireman. I point this out because I was laughed off another Yahoo group after asking a stupid question. I build these kinds of things, just hacking my way through trying to learn something. If you need to breach a concrete wall with a sledge hammer, that is more in line with my education and experience (yes, I have been called upon to do this more than once).
>
> Ok, so, I put the kit together with only a few minor problems. My kit was missing quite a few parts. Like six.

Sorry to hear about the missing parts. That is not what we are supposed to be doing, let me assure you.

I had a few of them in my junk box. Twice I had to ask for replacement parts because I didn't have them and neither did the local Radio Shack.

Not a lot of the SS-40 parts can be sourced from Radio Shack. Most of them come from Mouser and the rest from various sources.

Not sure what happened there.

If you asked for replacement parts, they should have been supplied.

>
> I don't own any test equipment other than an old Simpson 260 meter, so on some of the steps I just skipped the test proceedure. On the tests that I could perform, everything seemed fine. I finished it up and was instantly receiving signals on the appropriate step.
>
> When tuning up the front end by ear, TC1 and TC3 didn't sound like they did anything.

That's a serious problem. Tuning them should make a huge difference.

TC2 did make a big difference. I don't know if I got two peaks but I definitely got a nice sharp peak. I then took my reciever over to a local ham's house that has real test gear and this confirmed that TC1 and TC3 do nothing.

Either they aren't soldered in or the toroids they tune are not right or soldered in.

>
> The other problem I have is the audio output. From reading the posts on this forum, I

think I have a problem. Using a set of headphones from an iPod, I have the volume cranked all the way up to achieve a comfortable volume. I plugged a speaker into it and I couldn't hear a thing over the normal shack noise.

That's not correct either. With a speaker on the rig and a decent signal tuned in, it should blast you out of the shack with a speaker attached. Tons of audio.....

Prior to now, I assumed this was normal but appearently it isn't.

No, not normal at all.

>
> The other problem I have is sort of off topic. I simply can't put something like this in a case and have all the holes line up. I ruined a Ten Tec enclosure trying. I got the Magic Box in an enclosure with only one noticable over-sized hole which I can live with, but the receiver looked like a three year old did it (or me). I have had the Magic Box without a case for like a year simply because I was scared to even try putting it in an enclosure and having everything line up.

The intent was to have the drilling templates properly locate the holes that need to be drilled and of the correct size. If we missed that mark, it will get fixed, but we need some feedback where the problems are.

> I have ordered another kit and am going to keep all the controls and jacks off the board so I can mount them on the case without having to precisely line up five holes.

That will also work, but sort of defeats the purpose of having all of the controls PCB mounted to ease of construction and packaging.

I also don't like the antenna connector on the front

Can't put the rig into a case if that connector in on the back and the rest are on the front. As for an off-on switch, it was strictly and issued of not having any more real estate on the front panel for one. Can't be on the back for the same reason the antenna BNC isn't there.

and the lack of an on-off switch.
> My hat is off to you guys that posted pictures of your rigs. They look great. Unlike mine.

We will get your rig looking the same Ken. I'm off on another trip but when I get back, I'd be happy to put your rig on the bench and see what is wrong with it. If you like, send it to me at my call book address about mid-October and I will fix it for you!
>
> Ken
> AB7KT

72 and kind regards,

Jim, K8IQY

# 296. Re: My Build

Yahoo group: SS-40
Date: 2011-09-25 02:00:47 UTC
From: ab7kt@att.net
Topic: 284  Message: 296

I think I might have fixed it.

As I mentioned under another heading: the audio part was easy. After putting the project aside for a couple weeks, I looked at the board and I was missing a part. It was one of the parts that was missing in my kit. I didn't have it, went on building, and never went back to it. Again, after getting out of my tunnel vision, the problem was glaring.

Today, I removed both toriods from the board, rewound them, and reinstalled them. I used green wire so I could tell that all the insulation was off the wire. I also resoldered every component in the front end. The circuit board now looks like crap, but the receiver sounds great. TC2 and TC3 definitely peak up. I am still not convinced that TC1 is doing anything. But, I am finished with this. If there is a problem with TC1, the circuit board can't take anymore heat.

Anyway, thank you all very much for your help. Your suggestions were spot on and led me right to the problem. It HAD to be the coils. After removing them, I am pretty sure that solder was not sticking to the wire.

I have ordered another kit and am going to give it another go, although this one works great. This is really a nice reciever. I have built several other kit recievers and they all had huge drawbacks for actually using them on the air. The two biggest things being the fact that you are listening to about 2 mhz of the band at the same time, and the super critical tuning. This receiver on the other hand will definitely be a really nice reciever on the air. In fact, I have already made a couple QSOs using this receiver and my AC-1 Junior Transmitter.

Ken
AB7KT

# 297. Re: [SS-40] Re: SS-40 Resistors

Yahoo group: SS-40
Date: 2011-09-25 16:14:58 UTC
From: Jim Kortge
Topic: 261  Message: 297

On 9/16/2011 11:33 AM, Peter wrote:
> The 2.2K resistor color code is given incorrectly, the proper code is:
> Red Red Black Brown Brown
>
> Peter

Peter,

That is the color code in the latest version of the Assembly Manual.
I'm wondering if you have an earlier version where some of the color
codes were incorrect.

72,

Jim, K8IQY

# 298. Testing

Yahoo group: SS-40
Date: 2011-09-26 21:48:58 UTC
From: Arthur
Topic: 298  Message: 298

Hi Everybody,I got all the parts sorted out an labeled and got started on construction. I finished step 5 and tried the testing.I hooked the headset up first and when I applied power I got a loud "thump". Upon touching a test lead to L7 I got a "thump" and static when moving the jumper on L7, but no hum. With the jumper on L7 I would get a "click" when grounding the D6 cathode. Should I continue on with construction? I am working in a metal building, so if the 3 foot test lead is supposed to act like an antenna it might not be working-just a thought. Thanks in advance, Art

# 299. tuning pot

Yahoo group: SS-40
Date: 2011-09-29 16:05:02 UTC
From: kb4qnr
Topic: 299  Message: 299

I was wondering if anyone has tried a 5 turn pot as a replacement in the VCO circuit.
Thanks de kb4qnr
Bobby in Lexington ky.

# 300. tuning pot

Yahoo group: SS-40
Date: 2011-09-29 16:05:19 UTC
From: kb4qnr
Topic: 299  Message: 300

I was wondering if anyone has tried a 5 turn pot as a replacement in the VCO circuit.
Thanks de kb4qnr
Bobby in Lexington ky.

# 301. Re: [SS-40] tuning pot

Yahoo group: SS-40
Date: 2011-09-29 16:44:24 UTC
From: Bill
Topic: 299  Message: 301

Bobby,
I would think that a five turn or even three turn linear pot
would work great.  It could be 5K ohm or
10Kohm as the original SS-40 circuit used a 5K pot.  If you do use a 5K pot I believe you should
leave out or lift one side of R30.

The only down side of using a multi-turn pot is there is no easy way for dial calibration other than a digital dial.
 My SS-40 build has been interrupted due to putting a new
roof on my house. The first rains of the season are forecasted for next week so
the receiver build has been put on hold.

73, Bill - K6WLM

---
From: kb4qnr <kb4qnr@...>
To: SS-40@yahoogroups.com
Sent: Thursday, September 29, 2011 9:05 AM
Subject: [SS-40] tuning pot

I was wondering if anyone has tried a 5 turn pot as a replacement in the VCO circuit.
Thanks de kb4qnr
Bobby in Lexington ky.

# 302. Re: [SS-40] tuning pot

Yahoo group: SS-40
Date: 2011-09-29 17:05:31 UTC
From: Jim Kortge
Topic: 299  Message: 302

On 9/29/2011 12:44 PM, Bill wrote:
> Bobby,
> I would think that a five turn or even three turn linear pot
> would work great.? It could be 5K ohm or
> 10Kohm as the original SS-40 circuit? used a 5K pot.? If you do use a 5K pot I believe you should
> leave out or lift one side of R30.
> ?
> The only down side of using a multi-turn pot is there is no easy way for dial calibration other than a digital dial.
> ? My SS-40 build has been interrupted due to putting a new
> roof on my house. The first rains of the season are forecasted for next week so
> the receiver build has been put on hold.
> ?
> 73, Bill - K6WLM
> ?
>

The pot should be a 10K unit and R30 should be used to maximize the
linearity of the tuning.

72,

Jim, K8IQY

Ditto the comments on dial calibration!

# 303. Re: [SS-40] Testing

Yahoo group: SS-40
Date: 2011-09-29 18:43:17 UTC
From: Jim Kortge
Topic: 298  Message: 303

On 9/26/2011 5:48 PM, Arthur wrote:
> Hi Everybody,I got all the parts sorted out an labeled and got started on construction. I finished step 5 and tried the testing.I hooked the headset up first and when I applied power I got a loud "thump". Upon touching a test lead to L7 I got a "thump" and static when moving the jumper on L7, but no hum. With the jumper on L7 I would get a "click" when grounding the D6 cathode. Should I continue on with construction? I am working in a metal building, so if the 3 foot test lead is supposed to act like an antenna it might not be working-just a thought. Thanks in advance, Art
>

Art,

Are you still stuck or did you get this figured out? What did you hear/observe when you finished the audio amplifier?

72,

Jim, K8IQY

# 304. Re: tuning pot

Yahoo group: SS-40
Date: 2011-09-29 20:54:10 UTC
From: kb4qnr
Topic: 299  Message: 304

Thanks so much Bill and Jim.
73
Bobby

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 9/29/2011 12:44 PM, Bill wrote:
> > Bobby,
> > I would think that a five turn or even three turn linear pot
> > would work great.Â It could be 5K ohm or
> > 10Kohm as the original SS-40 circuitÂ used a 5K pot.Â If you do use a 5K pot I believe
you should
> > leave out or lift one side of R30.
> > Â
> > The only down side of using a multi-turn pot is there is no easy way for dial
calibration other than a digital dial.
> > Â My SS-40 build has been interrupted due to putting a new
> > roof on my house. The first rains of the season are forecasted for next week so
> > the receiver build has been put on hold.
> > Â
> > 73, Bill - K6WLM
> > Â
> >
>
> The pot should be a 10K unit and R30 should be used to maximize the
> linearity of the tuning.
>
> 72,
>
> Jim, K8IQY
>
> Ditto the comments on dial calibration!
>

# 305. Re: [SS-40] Testing

Yahoo group: SS-40
Date: 2011-09-29 23:59:03 UTC
From: Arthur Prior
Topic: 298  Message: 305

Jim, I tried it again, with the test lead out the window and I got a very faint hum that was adjustable. I don't know if it was the lead out the window that did the trick or I just could not hear the first time, but so far so good. Art

---
From: Jim Kortge <jim.k8iqy@gmail.com>
To: SS-40@yahoogroups.com
Cc: Arthur <fulltimerart@...>
Sent: Thursday, September 29, 2011 2:43 PM
Subject: Re: [SS-40] Testing

On 9/26/2011 5:48 PM, Arthur wrote:
> Hi Everybody,I got all the parts sorted out an labeled and got started on construction. I finished step 5 and tried the testing.I hooked the headset up first and when I applied power I got a loud "thump". Upon touching a test lead to L7 I got a "thump" and static when moving the jumper on L7, but no hum. With the jumper on L7 I would get a "click" when grounding the D6 cathode. Should I continue on with construction? I am working in a metal building, so if the 3 foot test lead is supposed to act like an antenna it might not be working-just a thought. Thanks in advance, Art
>

Art,

Are you still stuck or did you get this figured out? What did you hear/observe when you finished the audio amplifier?

72,

Jim, K8IQY

# 306. Re: [SS-40] Testing

Yahoo group: SS-40
Date: 2011-09-30 02:13:48 UTC
From: Jim Kortge
Topic: 298  Message: 306

On 9/29/2011 7:59 PM, Arthur Prior wrote:
> Jim, I tried it again, with the test lead out the window and I got a very faint hum that was adjustable. I don't know if it was the lead out the window that did the trick or I just could not hear the first time, but so far so good. Art
>
>

OK Art, thanks for the update.

72,

Jim, K8IQY

# 307. Fun on the air

Yahoo group: SS-40
Date: 2011-10-01 02:44:25 UTC
From: huyettm
Topic: 307  Message: 307

Just used my SS-40, NS-40 and MagicBox with a 40 meter/30 Meter fan dipole for a nice half hour qso on 7.030 with WA0JLY in CO. I am in SE WI. He gave me a 569 report. I'm very impressed with how well all the boxes work.

I took the coax connectors off the front and put them on the back of the MagicBox which makes a much nicer installation.

All that is needed now is to provide a way to use the tuning of the receiver to drive the transmit frequency! :-) Maybe that will be next year's project.

I have used the WA1FFL DirectDigital VFO with the SS-40 and it seems to work fine, though for the above QSO I used the builtin VXO. I have a switch on the back panel that allows me to switch between the VXO and DD VFO.

Nice gear!

Martin K0BXB

# 308. SS-40

Yahoo group: SS-40
Date: 2011-10-03 02:48:22 UTC
From: Ira B. Rothenhoefer
Topic: 219  Message: 308

HI;

I have purchased another SS-40 because I liked the other one so much. Anyway, I am going to take a little more care and see if I can identify the reason for the small amount of VXO tuning that I have. I do not have the 30 kc of variance.

Going through the schematic and determining the components that might cause this problem I think is a good idea. Maybe someone could help me out on that. Could the 2 toroids that have to be wound, be part of the problem?

73

Barney

# 309. Fw: Enclosure availability

Yahoo group: SS-40
Date: 2011-10-03 13:03:35 UTC
From: WA0ITP
Topic: 309  Message: 309

---- Original Message -----
From: WA0ITP
To: qrp-l@...
Sent: Monday, October 03, 2011 7:34 AM
Subject: Fw: Enclosure availability

If you have looked for enclosures on the Ten Tec site and discovered that none were listed, they are still available. TT has undergone a web site revision and the enclosure pages haven't been uploaded yet. I asked about it and their sales dept's reply is below.
---
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Sales, Enclosure
To: WA0ITP
Sent: Monday, October 03, 2011 7:09 AM
Subject: Re: Enclosure availability

Terry

No, we have not gone out of the enclosure business. Yes, they are still available. The new web site went live before we had time to get them up. Until they are back on the site, call 800-453-7172 and ask for sales.

Jerry Whaley

On Sun, Oct 2, 2011 at 3:38 PM, WA0ITP <wa0itp@...> wrote:

Has TT gone out of the enclosure business?
---
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

# 310. Re: SS-40

Yahoo group: SS-40
Date: 2011-10-04 21:50:43 UTC
From: homebrewer7
Topic: 219  Message: 310

The toroids have nothing to do with the tuning... they are part of the bandpass filter.

You ground all of the crystals?

Dave
Kd2AKC

--- In SS-40@yahoogroups.com, "Ira B. Rothenhoefer" <barneyro@...> wrote:
>
>
>
> HI;
>
> I have purchased another SS-40 because I liked the other one so much.
> Anyway, I am going to take a little more care and see if I can identify
> the reason for the small amount of VXO tuning that I have. I do not
> have the 30 kc of variance.
>
> Going through the schematic and determining the components that
> might cause this problem I think is a good idea. Maybe someone could
> help me out on that. Could the 2 toroids that have to be wound, be part
> of the problem?
>
> 73
>
> Barney
>

# 311. [SS-40] SS-40 Enclosure suggestions?

Yahoo group: SS-40
Date: 2011-10-04 22:00:22 UTC
From: Lee Mairs (SAG)
Topic: 219  Message: 311

Any body got soje ideas for SS-40 enclosures?
73 de Lee
KM4YY

# 312. Re: [SS-40] Re: SS-40

Yahoo group: SS-40
Date: 2011-10-05 00:31:31 UTC
From: Ira B. Rothenhoefer
Topic: 219  Message: 312

Yes, all the crystals are grounded.

Barney

On 10/4/2011 4:50 PM, homebrewer7 wrote:
>
> The toroids have nothing to do with the tuning... they are part of the
> bandpass filter.
>
> You ground all of the crystals?
>
> Dave
> Kd2AKC
>
> --- In SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>, "Ira B.
> Rothenhoefer" <barneyro@...> wrote:
> >
> >
> >
> > HI;
> >
> > I have purchased another SS-40 because I liked the other one so much.
> > Anyway, I am going to take a little more care and see if I can identify
> > the reason for the small amount of VXO tuning that I have. I do not
> > have the 30 kc of variance.
> >
> > Going through the schematic and determining the components that
> > might cause this problem I think is a good idea. Maybe someone could
> > help me out on that. Could the 2 toroids that have to be wound, be part
> > of the problem?
> >
> > 73
> >
> > Barney
> >
>
>

# 313. Re: [SS-40] SS-40 Enclosure suggestions?

Yahoo group: SS-40
Date: 2011-10-07 13:25:01 UTC
From: Ira B. Rothenhoefer
Topic: 219  Message: 313

It is recommended to use a Ten-Tec box and the number escapes me at the moment. I have fastened a piece of aluminum to a breadboard and was going to put both the SS40 and the NS40 in that together. Then there would be room for a small battery, like one from a UPS supply. That would 'neatin' up the op table. That's a heck of a lot cheaper than the Ten-Tec boxes.

Just my .02 cents worth.

73,

Barney

On 10/4/2011 5:00 PM, Lee Mairs (SAG) wrote:
>
> Any body got soje ideas for SS-40 enclosures?
> 73 de Lee
> KM4YY
>
>

# 314. Re: [SS-40] SS-40

Yahoo group: SS-40
Date: 2011-10-13 00:06:39 UTC
From: Jim Kortge
Topic: 219  Message: 314

On 10/2/2011 10:48 PM, Ira B. Rothenhoefer wrote:
>
>
> HI;
>
> I have purchased another SS-40 because I liked the other one so much.
> Anyway, I am going to take a little more care and see if I can
> identify the reason for the small amount of VXO tuning that I have. I
> do not have the 30 kc of variance.
>
> Going through the schematic and determining the components that might
> cause this problem I think is a good idea. Maybe someone could help me
> out on that. Could the 2 toroids that have to be wound, be part of the
> problem?
>
> 73
>
> Barney
>

Barney,

It is very important to ground the cases of the VXO crystals. Not
doing that will result is a tuning range that is very small compared
to when they are grounded. Having all of the correct parts in the
correct locations also helps a lot too.

72 and have fun,

Jim, K8IQY
Back from the Turkey Track Bluegrass Festival

# 315. Re: [SS-40] SS-40

Yahoo group: SS-40
Date: 2011-10-13 04:35:33 UTC
From: Ira B. Rothenhoefer
Topic: 219  Message: 315

Hi;

I am going through the build sequence for my first SS40 to make double sure I do have everything in the correct place. I have my crystals grounded right through the middle of the top of the cases to line up with the ground pad. I wouldn't think it makes any difference which part of the crystal the ground wire is soldered to, but it might.

I'll keep you up to date on this little project...

73

Barney

On 10/12/2011 7:06 PM, Jim Kortge wrote:
>
> On 10/2/2011 10:48 PM, Ira B. Rothenhoefer wrote:
> >
> >
> > HI;
> >
> > I have purchased another SS-40 because I liked the other one so much.
> > Anyway, I am going to take a little more care and see if I can
> > identify the reason for the small amount of VXO tuning that I have. I
> > do not have the 30 kc of variance.
> >
> > Going through the schematic and determining the components that might
> > cause this problem I think is a good idea. Maybe someone could help me
> > out on that. Could the 2 toroids that have to be wound, be part of the
> > problem?
> >
> > 73
> >
> > Barney
> >
>
> Barney,
>
> It is very important to ground the cases of the VXO crystals. Not
> doing that will result is a tuning range that is very small compared
> to when they are grounded. Having all of the correct parts in the
> correct locations also helps a lot too.
>
> 72 and have fun,
>
> Jim, K8IQY

> Back from the Turkey Track Bluegrass Festival
>
>

# 316. Re: [SS-40] SS-40

Yahoo group: SS-40
Date: 2011-10-13 17:35:00 UTC
From: Jim Kortge
Topic: 219  Message: 316

On 10/13/2011 12:35 AM, Ira B. Rothenhoefer wrote:
> Hi;
>
> I am going through the build sequence for my first SS40 to make double
> sure I do have everything in the correct place. I have my crystals
> grounded right through the middle of the top of the cases to line up
> with the ground pad.

That will work fine.

I wouldn't think it makes any difference which
> part of the crystal the ground wire is soldered to, but it might.

No it doesn't. Grounding any part of the case is sufficient.
>
> I'll keep you up to date on this little project...

Yes, please do.
>
> 73
>
> Barney
>

72,

Jim, K8IQY

# 317. Inductor color codes missing in instructions

Yahoo group: SS-40
Date: 2011-10-18 22:57:07 UTC
From: leftyretro
Topic: 317  Message: 317

I'm building and having fun with my SS-40. However I'm sure challenged concerning color coding on the resistors and inductors. Of course I can measure the resistors, but the inductors are another matter. The instructions give inductor color codings on page 30 of ss-40assemblymanualv1.1a4.pdf but do not list colors for L1 (3.1 uh) and L4 (3.3 uh). Could someone help verify the colors I should expect to see for these two inductors.

Thanks;
Larry WA6TKD

# 318. Re: [SS-40] Inductor color codes missing in instructions

Yahoo group: SS-40
Date: 2011-10-18 23:52:54 UTC
From: Jim Kortge
Topic: 317  Message: 318

On 10/18/2011 6:57 PM, leftyretro wrote:
> I'm building and having fun with my SS-40. However I'm sure challenged concerning color coding on the resistors and inductors. Of course I can measure the resistors, but the inductors are another matter. The instructions give inductor color codings on page 30 of ss-40assemblymanualv1.1a4.pdf but do not list colors for L1 (3.1 uh) and L4 (3.3 uh). Could someone help verify the colors I should expect to see for these two inductors.
>
> Thanks;
> Larry WA6TKD

Larry,

No color codes on L1 and L4. They are both wound on toroid cores
(T37-2 type which are colored red) hence, not molded inductors with
color codes like the rest of the inductors. I hope that helps.....

72,

Jim, K8IQY

# 319. Re: Inductor color codes missing in instructions

Yahoo group: SS-40
Date: 2011-10-19 00:34:51 UTC
From: leftyretro
Topic: 317  Message: 319

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 10/18/2011 6:57 PM, leftyretro wrote:
> > I'm building and having fun with my SS-40. However I'm sure challenged concerning color coding on the resistors and inductors. Of course I can measure the resistors, but the inductors are another matter. The instructions give inductor color codings on page 30 of ss-40assemblymanualv1.1a4.pdf but do not list colors for L1 (3.1 uh) and L4 (3.3 uh). Could someone help verify the colors I should expect to see for these two inductors.
> >
> > Thanks;
> > Larry WA6TKD
>
> Larry,
>
> No color codes on L1 and L4. They are both wound on toroid cores
> (T37-2 type which are colored red) hence, not molded inductors with
> color codes like the rest of the inductors. I hope that helps.....
>
> 72,
>
> Jim, K8IQY
>

Yes it does, thanks for that. About 1/3 done so far. Im very impressed with the quality of the board and materials so far. It's got to be the best $50 bargain yet in the QRP world.

Larry, WA6TKD

# 320. Re: IP3 data?

Yahoo group: SS-40
Date: 2011-10-22 16:02:12 UTC
From: Peter
Topic: 277  Message: 320

Posting for Jim:

I just finished a -10 dBm, 40-meter signal source and measured the SS-40 receiver IIP3 at -2 dBm. It is better than I expected for such a simple design. Using that figure and and MDS of -132 dBm, typical for most of the rigs, that puts the IMDDR3 at about 87 dB. Those figures are for a signal spacing of 5 KHz, using 7.035 and 7.040 MHz for the two inputs. I'd sure like to hear reports from Europe how the receiver plays in that high SW RF environment.

72 and kind regards,

Jim, K8IQY

Jim replied to me with the above yesterday, he also sent it to this yahoo group.
As I did not see his reply in this group, I am posting it. If it is a duplicate posting, my apologies.

Peter

--- In SS-40@yahoogroups.com, "Peter" <orbanp1@...> wrote:
>
> Hello Everyone,
>
> I am just wondering if anyone has measured the IP3 performance of the receiver. That data is not provided among the specs.
> Would be interesting to see how the SS-40 measures up.
>
> Regards, Peter
>

# 321. Re: SS-40 Japanese Manual

Yahoo group: SS-40
Date: 2011-10-23 19:02:26 UTC
From: Jim Kortge
Topic: 321  Message: 321

On 10/21/2011 10:25 PM, JH0CCK wrote:
> Hi Jim K8IQY

Greetings Kyonosuke,

>
> I enjoy receiving 40m band with SS-40 everyday.

Glad that you like the receiver! :-)

> In addition. Japanese CW band is 7000-7030KHz and QRP spot is 7003KHz.

OK, I had not know that before. They have your calling frequency way
down in the band.

> So, I tried to change covering frequency of SS-40 how to install L9
> 5mm up from the PCB to increase the inductance.

Yes, that will help a little, and indeed in your case, was enough.

Fortunately it works
> well. My SS-40 can receive about 7000-7037Khz now and the VXO is still
> stable.But I am not sure that is right way to do.

If it works, it is the right thing to do.

> I would like you to tell SS-40 Japanese user the right way to change
> covering frequency of it if you would. Of course,I will translate the
> announce into Japanese that time.

Well there are additional ways if elevating the L9-5.6 uH inductor
doesn't get the VXO down low enough in frequency. One can add a small
molded inductor in series with the 5.6 uH, something on the order of
0.10 uH to perhaps 0.27 uH should get the job done. I tried a 0.15 uH
on my rig, and now it tunes from 7.002 MHz to 7.040 MHz. I also tried
replacing the L9 molded inductor with a T37-2 toroid core wound with
37 turns of #32 wire. That also worked to get me down to 7.000 MHz.
I could squeeze the turns together to get exactly the right amount of
inductance to hit the bottom of the band, so that method works well also.
>
> Thank you.

Thank you again for your interest in the receiver and help with the
manual. Hopefully, ,my comments above will help other Japanese
builders get the receiver down low enough in the band to be more useable.

72 and kind regards my friend,

Jim, K8IQY

# 322. Fwd: Re: SS-40 Japanese Manual

Yahoo group: SS-40
Date: 2011-10-23 20:41:20 UTC
From: Jim Kortge
Topic: 321  Message: 322

```
-------- Original Message --------
Subject: Re: SS-40 Japanese Manual
Date: Sun, 23 Oct 2011 15:02:26 -0400
From: Jim Kortge <jim.k8iqy@...>
To: jh0cck@...
CC: WA0ITP <wa0itp@...>

On 10/21/2011 10:25 PM, JH0CCK wrote:
> Hi Jim K8IQY

Greetings Kyonosuke,

>
> I enjoy receiving 40m band with SS-40 everyday.

Glad that you like the receiver! :-)

> In addition. Japanese CW band is 7000-7030KHz and QRP spot is 7003KHz.

OK, I had not know that before. They have your calling frequency way
down in the band.

> So, I tried to change covering frequency of SS-40 how to install L9
> 5mm up from the PCB to increase the inductance.

Yes, that will help a little, and indeed in your case, was enough.

Fortunately it works
> well. My SS-40 can receive about 7000-7037Khz now and the VXO is still
> stable.But I am not sure that is right way to do.

If it works, it is the right thing to do.

> I would like you to tell SS-40 Japanese user the right way to change
> covering frequency of it if you would. Of course,I will translate the
> announce into Japanese that time.

Well there are additional ways if elevating the L9-5.6 uH inductor
doesn't get the VXO down low enough in frequency. One can add a small
molded inductor in series with the 5.6 uH, something on the order of
0.10 uH to perhaps 0.27 uH should get the job done. I tried a 0.15 uH
on my rig, and now it tunes from 7.002 MHz to 7.040 MHz. I also tried
replacing the L9 molded inductor with a T37-2 toroid core wound with
37 turns of #32 wire. That also worked to get me down to 7.000 MHz.
I could squeeze the turns together to get exactly the right amount of
inductance to hit the bottom of the band, so that method works well also.
>
> Thank you.
```

Thank you again for your interest in the receiver and help with the manual. Hopefully, ,my comments above will help other Japanese builders get the receiver down low enough in the band to be more useable.

72 and kind regards my friend,

Jim, K8IQY

# 323. Test - Please Ignore

Yahoo group: SS-40
Date: 2011-10-24 00:03:19 UTC
From: Jim Kortge
Topic: 323  Message: 323

Test message from Jim, K8IQY. Please ignore.

# 324. Another Test Message

Yahoo group: SS-40
Date: 2011-10-24 00:36:53 UTC
From: Jim Kortge
Topic: 324  Message: 324

I'm trying to get mail sent to the SS-40 group to be delivered to me!

Something is broken I think.....

Jim, K8IQY

# 325. Fwd: Re: SS-40 Japanese Manual

Yahoo group: SS-40
Date: 2011-10-24 11:28:53 UTC
From: Hide
Topic: 321  Message: 325

Jim,Thanks!

Good news for me!!
I will try it.

ja9mat Hidehiko.

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
>
>
> -------- Original Message --------
> Subject: Re: SS-40 Japanese Manual
> Date: Sun, 23 Oct 2011 15:02:26 -0400
> From: Jim Kortge <jim.k8iqy@...>
> To: jh0cck@...
> CC: WA0ITP <wa0itp@...>
>
> On 10/21/2011 10:25 PM, JH0CCK wrote:
> > Hi Jim K8IQY
>
> Greetings Kyonosuke,
>
> >
> > I enjoy receiving 40m band with SS-40 everyday.
>
> Glad that you like the receiver! :-)
>
> > In addition. Japanese CW band is 7000-7030KHz and QRP spot is 7003KHz.
>
> OK, I had not know that before. They have your calling frequency way
> down in the band.
>
> > So, I tried to change covering frequency of SS-40 how to install L9
> > 5mm up from the PCB to increase the inductance.
>
> Yes, that will help a little, and indeed in your case, was enough.
>
> Fortunately it works
> > well. My SS-40 can receive about 7000-7037Khz now and the VXO is still
> > stable.But I am not sure that is right way to do.
>
> If it works, it is the right thing to do.
>
> > I would like you to tell SS-40 Japanese user the right way to change
> > covering frequency of it if you would. Of course,I will translate the

> > announce into Japanese that time.
>
> Well there are additional ways if elevating the L9-5.6 uH inductor
> doesn't get the VXO down low enough in frequency. One can add a small
> molded inductor in series with the 5.6 uH, something on the order of
> 0.10 uH to perhaps 0.27 uH should get the job done. I tried a 0.15 uH
> on my rig, and now it tunes from 7.002 MHz to 7.040 MHz. I also tried
> replacing the L9 molded inductor with a T37-2 toroid core wound with
> 37 turns of #32 wire. That also worked to get me down to 7.000 MHz.
> I could squeeze the turns together to get exactly the right amount of
> inductance to hit the bottom of the band, so that method works well also.
> >
> > Thank you.
>
> Thank you again for your interest in the receiver and help with the
> manual. Hopefully, ,my comments above will help other Japanese
> builders get the receiver down low enough in the band to be more useable.
>
> 72 and kind regards my friend,
>
> Jim, K8IQY
>

# 326. Re: [SS-40] IP3 data?

Yahoo group: SS-40
Date: 2011-10-19 22:12:46 UTC
From: Jim Kortge
Topic: 277  Message: 326

On 9/14/2011 11:13 AM, Peter wrote:
> Hello Everyone,
>
> I am just wondering if anyone has measured the IP3 performance of the receiver. That data is not provided among the specs.
> Would be interesting to see how the SS-40 measures up.
>
> Regards, Peter

I just finished a -10 dBm, 40-meter signal source and measured the SS-40 receiver IIP3 at -2 dBm. It is better than I expected for such a simple design. Using that figure and and MDS of -132 dBm, typical for most of the rigs, that puts the IMDDR3 at about 87 dB. Those figures are for a signal spacing of 5 KHz, using 7.035 and 7.040 MHz for the two inputs. I'd sure like to hear reports from Europe how the receiver plays in that high SW RF environment.

72 and kind regards,

Jim, K8IQY

# 327. Re: [SS-40] IP3 data?

Yahoo group: SS-40
Date: 2011-10-31 15:24:53 UTC
From: Paul Playford
Topic: 277  Message: 327

As I have discovered over and over again during my electronics career - specifications don't lie, but liars do specify. The best witness to that is the measured bandwidth of any filter versus the manufacturers published specifications.

It is so easy to measure filter bandwidth today I just cannot understand why the liars can get away with their stories.

I live in the country and am not concerned with IP3, but I do have this thing about MDS. And my SS-40 has an MDS of -134, right up there with my FT-1000D with the APF enabled. The difference is the APF is seldom if ever used but the SS-40's MDS is there always.

de Paul, W8AEF

-----Original Message-----
From: Jim Kortge
Sent: Wednesday, October 19, 2011 3:12 PM
To: SS-40@yahoogroups.com
Cc: Peter
Subject: Re: [SS-40] IP3 data?

On 9/14/2011 11:13 AM, Peter wrote:
> Hello Everyone,
>
> I am just wondering if anyone has measured the IP3 performance of the
> receiver. That data is not provided among the specs.
> Would be interesting to see how the SS-40 measures up.
>
> Regards, Peter

I just finished a -10 dBm, 40-meter signal source and measured the SS-40 receiver IIP3 at -2 dBm. It is better than I expected for such a simple design. Using that figure and and MDS of -132 dBm, typical for most of the rigs, that puts the IMDDR3 at about 87 dB. Those figures are for a signal spacing of 5 KHz, using 7.035 and 7.040 MHz for the two inputs. I'd sure like to hear reports from Europe how the receiver plays in that high SW RF environment.

72 and kind regards,

Jim, K8IQY

# 328. Re: [SS-40] IP3 data?

Yahoo group: SS-40
Date: 2011-10-31 15:56:02 UTC
From: WA0ITP
Topic: 277  Message: 328

GM Paul,

Thanx for the nice comments. Jim's receivers certainly raise (err, lower?) the MDS bar for simple receivers !
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Paul Playford" <paul@...>
To: <SS-40@yahoogroups.com>
Sent: Monday, October 31, 2011 10:24 AM
Subject: Re: [SS-40] IP3 data?

| As I have discovered over and over again during my electronics career -
| specifications don't lie, but liars do specify. The best witness to that is
| the measured bandwidth of any filter versus the manufacturers published
| specifications.
|
| It is so easy to measure filter bandwidth today I just cannot understand why
| the liars can get away with their stories.
|
| I live in the country and am not concerned with IP3, but I do have this
| thing about MDS. And my SS-40 has an MDS of -134, right up there with my
| FT-1000D with the APF enabled. The difference is the APF is seldom if ever
| used but the SS-40's MDS is there always.
|
| de Paul, W8AEF
|
| -----Original Message-----
| From: Jim Kortge
| Sent: Wednesday, October 19, 2011 3:12 PM
| To: SS-40@yahoogroups.com
| Cc: Peter
| Subject: Re: [SS-40] IP3 data?

|
| On 9/14/2011 11:13 AM, Peter wrote:
| > Hello Everyone,
| >
| > I am just wondering if anyone has measured the IP3 performance of
the
| > receiver. That data is not provided among the specs.
| > Would be interesting to see how the SS-40 measures up.
| >
| > Regards, Peter
|
| I just finished a -10 dBm, 40-meter signal source and measured the
| SS-40 receiver IIP3 at -2 dBm. It is better than I expected for
such
| a simple design. Using that figure and and MDS of -132 dBm, typical
| for most of the rigs, that puts the IMDDR3 at about 87 dB. Those
| figures are for a signal spacing of 5 KHz, using 7.035 and 7.040 MHz
| for the two inputs. I'd sure like to hear reports from Europe how
the
| receiver plays in that high SW RF environment.
|
| 72 and kind regards,
|
| Jim, K8IQY
|
|
|
| ------------------------------------
|
| Yahoo! Groups Links
|
|
|

# 329. Re: [SS-40] IP3 data?

Yahoo group: SS-40
Date: 2011-10-31 16:27:53 UTC
From: Paul Playford
Topic: 277  Message: 329

It makes very expensive receivers look bad also.

de Paul, W8AEF

-----Original Message-----
From: WA0ITP
Sent: Monday, October 31, 2011 8:56 AM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] IP3 data?

GM Paul,

Thanx for the nice comments. Jim's receivers certainly raise (err, lower?) the MDS bar for simple receivers !
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

# 330. Re: [SS-40] IP3 data?

Yahoo group: SS-40
Date: 2011-10-31 16:49:01 UTC
From: Stephen Farthing
Topic: 277  Message: 330

Hi Guys,

When I have finished putting the workshop back together I'll built the RX and try it out under European conditions and report back....
But sometimes I wonder about the race for ever higher performance. Ultimately it is the operator of the receiver that counts.....and in this day I sometimes wonder with all this performance available to us if it really matters to the "average" amateur. Because to use the performance one has to understand how to operate the receiver and I am not certain that many hams understand much beyond how to operate the tuning knob.

A few years back I visited the Portishead shore station near Bristol in the UK as part of a club visit before it closed down. The wx op there used a Racal 1792 rx.....and he said "The one thing you will notice about this RX is that it has very few controls compared with the average ham rx. But it does the job because I know how to operate it". Whilst it was pretty patronizing there was a deal of truth in what he said. More knobs and switches are all very nice but if you don't know how to use them for real they are a waste of time and money!

Back to drilling holes in the garage floor so I can fix the drill press to it.

73s Steve G0XAR

--
RIP Dennis Richie, I'm sure you will still be cutting code somewhere out there in the universe. You gave the world "C" and taught me a lot.

# 331. Re: [SS-40] IP3 data?

Yahoo group: SS-40
Date: 2011-10-31 17:16:17 UTC
From: WA0ITP
Topic: 277  Message: 331

Absolutely spot on Steve.

We're looking forward to your comments on the SS-40's performance in the UK.
---
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Stephen Farthing
To: SS-40@yahoogroups.com
Sent: Monday, October 31, 2011 11:49 AM
Subject: Re: [SS-40] IP3 data?

Hi Guys,

When I have finished putting the workshop back together I'll built the RX and try it out under European conditions and report back....
But sometimes I wonder about the race for ever higher performance. Ultimately it is the operator of the receiver that counts.....and in this day I sometimes wonder with all this performance available to us if it really matters to the "average" amateur. Because to use the performance one has to understand how to operate the receiver and I am not certain that many hams understand much beyond how to operate the tuning knob.

A few years back I visited the Portishead shore station near Bristol in the UK as part of a club visit before it closed down. The wx op there used a Racal 1792 rx.....and he said "The one thing you will notice about this RX is that it has very few controls compared with the average ham rx. But it does the job because I know how to operate it". Whilst it was pretty patronizing there was a deal of truth in what he said. More knobs and switches are all very nice but if you don't know how to use them for real they are a waste of time and money!

Back to drilling holes in the garage floor so I can fix the drill press to it.

73s Steve G0XAR

--
RIP Dennis Richie, I'm sure you will still be cutting code somewhere out there in the universe. You gave the world "C" and taught me a lot.

# 332. Added DDS module, works great.

Yahoo group: SS-40
Date: 2011-11-07 18:11:44 UTC
From: leftyretro
Topic: 332  Message: 332

After completing my SS-40 I went the next set and modded it with
a cheap Asian ADS9850 module sold on E-bay (
http://www.ebay.com/itm/270842833841?ssPageName=STRK:MEWNX:IT&_trksid=p3984.m1439.l2649 )

I lifted one lead of cap C-50 and wired the DDS output via a .1 ufd cap to the unused cap position C-52. The output from the DDS is only about 1vpp at the wiper of TR2 when at it's max value, so probably not driving the diode mixer at it's optimum value, however it doesn't seem to effect the SS-40's sensitivity and this weekends SS contest had no trouble hearing a zillion stations on during the contest. Possibly I'll see if there is a simple amp circuit I can build to raise the DDS output but in the mean time it sure seems to work great.

I'm using a standalone Arduino AVR328p chip to control the DDS via a nice optical encoder. I got and modified the code from this site:

http://www.theladderline.com/inexpensive-ad9850-dds-boards-ebay

Great little receiver, must be the value of the century.

Larry WA6TKD

# 333. Added DDS module

Yahoo group: SS-40
Date: 2011-11-09 18:39:07 UTC
From: Steve Silverman
Topic: 333  Message: 333

Hi Larry

What tuning range do you now get with the DDS with the SS-40?

73

Steve KB3SII

# 334. SS-40 Inventory List

Yahoo group: SS-40
Date: 2011-11-10 17:15:03 UTC
From: rich3
Topic: 334  Message: 334

```
New file posted to the SS-40 Group File Section Under SS-40 Documentation.
```

# 335. Re: Added DDS module

Yahoo group: SS-40
Date: 2011-11-11 03:35:35 UTC
From: leftyretro
Topic: 333  Message: 335

--- In SS-40@yahoogroups.com, Steve Silverman <n6363l@...> wrote:
>
> Hi Larry
>
> What tuning range do you now get with the DDS with the SS-40?
>
> 73
>
> Steve KB3SII
>

Hi Steve;

Well there is no limit as far as the DDS module is concerned, it can develope a sine wave output under software control from 1 Hz to 60 Mhz. The practical limit would be the SS-40's front end bandpass filter tuning range. I've listened to SSB on 7.2+ with the DDS, but did have to short out the crystal filter input to output to be able to actually understand SSB signals, and without any selectivity of course the bandpass was quite broad with lots of high audio frequency noise and hiss, but still it was cool to fool around with the expanded band coverage that the DDS LO allows.

Larry WA6TKD

# 336. Re: SS-40 Inventory List

Yahoo group: SS-40
Date: 2011-11-14 12:35:25 UTC
From: sierrapumpkindog
Topic: 334  Message: 336

Thanks for the list with the color codes already figured.
I believe the 2.2k should red red black brown brown.

--- In SS-40@yahoogroups.com, "rich3" <k8meg@...> wrote:
>
> New file posted to the SS-40 Group File Section Under SS-40 Documentation.
>

# 337. Re: [SS-40] Re: SS-40 Inventory List

Yahoo group: SS-40
Date: 2011-11-14 13:57:03 UTC
From: WA0ITP
Topic: 334  Message: 337

Some time ago I uploaded an excellent resistor graphic calculator to the SS-40 page. Also a vy good capacitor identificaton sheet http://www.wa0itp.com/ss40.html Both are very useful when building kits.

Hope they help.
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "sierrapumpkindog" <raphillips@...>
To: <SS-40@yahoogroups.com>
Sent: Monday, November 14, 2011 6:35 AM
Subject: [SS-40] Re: SS-40 Inventory List

|
|
| Thanks for the list with the color codes already figured.
| I believe the 2.2k should red red black brown brown.
|
| --- In SS-40@yahoogroups.com, "rich3" <k8meg@...> wrote:
| >
| > New file posted to the SS-40 Group File Section Under SS-40
Documentation.
| >
|
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 338. SS40 Build

Yahoo group: SS-40
Date: 2011-11-15 17:00:30 UTC
From: Sid Leben
Topic: 338  Message: 338

I am finally getting around to building the receiver. My kit was shipped prior to June 2011, but I do have the VR2, 10 K kit. As well as the R30 15k resistor.

I am using the latest build instructions for kits sent After June 2011. Am I ok in doing this ??? Are there any changes that I am not aware of ??
Thanks
Sid
KC2EE

# 339. Re: [SS-40] SS40 Build

Yahoo group: SS-40
Date: 2011-11-15 19:59:47 UTC
From: WA0ITP
Topic: 338  Message: 339

Hello Sid,

You're ok,

Just curious, does your kit have 2 smallpins and is the 10k pot is one with solder tabs, not board mount pins?
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Sid Leben
To: SS-40@yahoogroups.com
Sent: Tuesday, November 15, 2011 11:00 AM
Subject: [SS-40] SS40 Build

I am finally getting around to building the receiver. My kit was shipped prior to June 2011, but I do have the VR2, 10 K kit. As well as the R30 15k resistor.

I am using the latest build instructions for kits sent After June 2011. Am I ok in doing this ??? Are there any changes that I am not aware of ??
Thanks
Sid
KC2EE

# 340. Re: [SS-40] SS40 Build

Yahoo group: SS-40
Date: 2011-11-15 20:07:24 UTC
From: Sid Leben
Topic: 338  Message: 340

Terry,
Yes, I used the two small pins. The pot has solder tabs. I also installed the 15k for R30. Working on the AGC circuit, so far so good. My old eyes and fingers are not what they used to be. I have built the NS40 xmtr, as well as the interface.
My wife took ill a while back & everything was put on hold..
My radios are: K3/P3, SDR-Cube (N2APB-George Heron) Juma PA100D 100W amp.

Thanks for prompt reply. I hope build goes well, as I have limited test eqpt. Thanks for all your work.
Wow ! That board has a lot of ground plane !!!!!
Sid Leben
KC2EE

From: WA0ITP <wa0itp@...<mailto:wa0itp@...>>
Reply-To: "SS-40@yahoogroups.com<mailto:SS-40@yahoogroups.com>" <SS-40@yahoogroups.com<mailto:SS-40@yahoogroups.com>>
Date: Tue, 15 Nov 2011 11:59:47 -0800
To: "SS-40@yahoogroups.com<mailto:SS-40@yahoogroups.com>" <SS-40@yahoogroups.com<mailto:SS-40@yahoogroups.com>>
Subject: Re: [SS-40] SS40 Build

Hello Sid,

You're ok,

Just curious, does your kit have 2 smallpins and is the 10k pot is one with solder tabs, not board mount pins?
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...<mailto:wa0itp@...>
www.wa0itp.com<http://www.wa0itp.com>
www.4sqrp.com<http://www.4sqrp.com>
www.qrpspots.com<http://www.qrpspots.com>

----- Original Message -----
From: Sid Leben<mailto:sid@...>
To: SS-40@yahoogroups.com<mailto:SS-40@yahoogroups.com>
Sent: Tuesday, November 15, 2011 11:00 AM
Subject: [SS-40] SS40 Build

I am finally getting around to building the receiver. My kit was shipped prior to June 2011, but I do have the VR2, 10 K kit. As well as the R30 15k resistor.

I am using the latest build instructions for kits sent After June 2011. Am I ok in doing this ??? Are there any changes that I am not aware of ??

Thanks
Sid
KC2EE

# 341. SS40 Build

Yahoo group: SS-40
Date: 2011-11-17 01:24:02 UTC
From: Sid Leben
Topic: 338  Message: 341

Scope readings for VXO build. End of step 10.
Build went well so far with good readings, then the VXO tests. Using a scope:

From lower pad of C54: 1v to 2.5v p-p

From MX1-6: 2.2v to 3.6v p-p Not the 5v to 7v p-p as in instructions.
Am I alright to continue ?

Sid
KC2EE

# 342. Re: [SS-40] SS40 Build

Yahoo group: SS-40
Date: 2011-11-17 03:58:34 UTC
From: Jim Kortge
Topic: 338  Message: 342

On 11/16/2011 8:24 PM, Sid Leben wrote:
> Scope readings for VXO build. End of step 10.
> Build went well so far with good readings, then the VXO tests. Using a scope:
>
>> From lower pad of C54: 1v to 2.5v p-p
>
>> From MX1-6: 2.2v to 3.6v p-p Not the 5v to 7v p-p as in instructions.
> Am I alright to continue ?
>
> Sid
> KC2EE
>

Sid,

Your OK to continue. The 5-7 volt p-p level seems way too high; not sure where I got that. I just measured the output of an SS-40 being built and the VXO output with TR2 fully CW was 3.6 volts and is almost that level with TR2 set at its mid-position.

So, the next time I build an SS-40, I'll have to remeasure the VXO output so we can converge on a reasonable value.

72,

Jim, K8IQY

# 343. SS-40 Completion

Yahoo group: SS-40
Date: 2011-11-19 04:50:26 UTC
From: Sid Leben
Topic: 343  Message: 343

I finished it up today. Real nice & worked like a charm.
I have a 33kc spread with upper limit at 7042.5 It would be nice to shift the range up a few kc,
Only question is on the volume control. I keep it at minimum, (full ccw) . As I increase volume, it seems to just increase background noise. I can copy most signals at full ccw. The very strong ones can not be attenuated. I did the TR1 AGC adjustment. Full cw was 1.4 v. I reduced to 1.1v then touched it up with a weak signal. Abt 1.25 v

Now that the trio is assembled, I just have to case up the rcvr & xmtr & have some fun.

Sid
KC2EE

# 344. Re: [SS-40] SS-40 Completion

Yahoo group: SS-40
Date: 2011-11-19 22:34:28 UTC
From: Jim Kortge
Topic: 343  Message: 344

On 11/18/2011 11:50 PM, Sid Leben wrote:
> I finished it up today. Real nice& worked like a charm.

Good show Sid, but your comment below about the volume worries me a bit. As you increase the volume, the signal ought to get louder, much more than the noise does. So we may have a problem there.

> I have a 33kc spread with upper limit at 7042.5

You have a winner there.

It would be nice to shift the range up a few kc,

You can reduce the 5.6 uH choke at L9; install a 4.7 uH and you'll get more at the top end, but lose some at the bottom. You might end up with only 25 KHz of the band.

> Only question is on the volume control. I keep it at minimum, (full ccw) . As I increase volume, it seems to just increase background noise.

No, that isn't right. Audio ought to come up too.

I can copy most signals at full ccw.

That doesn't sound right either. On mine, when the volume is fully CCW, only the very strong signals are heard, and not at a level that my old ears like.

> The very strong ones can not be attenuated.

Is the volume control working? Sounds like we have an issue somewhere in the rig.

I did the TR1 AGC adjustment. Full cw was 1.4 v.

Where is is 1.4V ? When I remove the antenna and measure the left pad of C22, I have a reading of 1.432 volts, which is about were it should be. That level is set by the innards of the SA612 chip. Under those conditions, I also measure 0.067 volts on the bottom of R7 (which is also the collector of Q3. With the antenna connected and no station tuned in, I measure about 1.26 volts on the left pad of C22 and about 0.126 volts on the bottom of R7. My AGC trim pot, TR1 is setting as close to mid-point as I can tell.

I reduced to 1.1v then touched it up with a weak signal. Abt 1.25 v

I'm not clear where the voltage measurements above are from Sid. I hope you remember that the audio jack on the receiver has to be isolated from ground. I used a piece of shrink tubing over the barrel

of that stereo jack so it could not short to the case. The audio is
on the tip and ring of the jack, not on the barrel and if the barrel
is grounded, the audio can be shorted out when a speaker or earphones
are plugged in.

>
> Now that the trio is assembled, I just have to case up the rcvr& xmtr& have some fun.

Looking forward to hearing how you like the trio. Have fun putting
them in their cases.
>
> Sid
> KC2EE

72 and kind regards,

Jim, K8IQY

# 345. R30 vs R35 part selection

Yahoo group: SS-40
Date: 2011-11-22 19:58:22 UTC
From: ronreeves
Topic: 345  Message: 345

My SS-40 kit came with 2 - 15K resistors. One is a blue body 5-band marking measuring approx 14.9K and the other is a tan body 4-band marking measuring approx 14.8K. The 1.1A4 assembly manual shows a photo with R35 being the blue body 15K resistor but not showing a photo of the installed R30 resistor. Other than the photo, the manual doesn't specify which part goes where. Looking at the photo collection on the site, I see recent rigs with these parts swapped. Which part is supposed to be R30 (VXO Tuning TBD) and which is supposed to be R35 (Q8 Base bias)? I assume R35 is in the more noise-critical circuit.
72, Ron, NN5R

# 346. Re: [SS-40] R30 vs R35 part selection

Yahoo group: SS-40
Date: 2011-11-22 20:19:21 UTC
From: Jim Kortge
Topic: 345  Message: 346

On 11/22/2011 2:58 PM, ronreeves wrote:
> My SS-40 kit came with 2 - 15K resistors. One is a blue body 5-band marking measuring approx 14.9K

That is the R35 part.

and the other is a tan body 4-band marking measuring approx 14.8K.

That is the R30 part.

The 1.1A4 assembly manual shows a photo with R35 being the blue
body 15K resistor but not showing a photo of the installed R30 resistor.

That's because we have not update the assembly manual to reflect the
10K linear pot that is now shipping with the rig and now uses the R30
resistor. 'Ol Jim has got too many irons in the fire to get around to
updating the SS-40 Assembly Manual.

Other than the photo, the manual doesn't specify which part goes where.

See above.....

Looking at the photo collection on the site, I see recent rigs with
these parts swapped. Which part is supposed to be R30 (VXO Tuning TBD)

The one with the tan body.

and which is supposed to be R35 (Q8 Base bias)?

The blue body one.

I assume R35 is in the more noise-critical circuit.

Yes, you are correct.

> 72, Ron, NN5R
>

72 and have fun building it,

Jim, K8IQY

# 347. SS40

Yahoo group: SS-40
Date: 2011-12-07 19:51:31 UTC
From: Ira B. Rothenhoefer
Topic: 241  Message: 347

HI;

My 2nd SS40 has about 20 Kc spread. However, my old sig gen wouldn't start this morning, so Don't know for sure.

Looks like 7.022 to 7.042. I wonder if the tolerances are stacking up against me, or if it is something I have done wrong? The other SS40 is about the same. Maybe I could have someone else look at it? .....

Barney/NO0N

# 348. Power Switch

Yahoo group: SS-40
Date: 2012-01-03 05:52:35 UTC
From: fred
Topic: 348  Message: 348

I was wondering if the SS-40 was intended to be powered-up by just plugging in a power cord or if anyone has installed an on/off switch on the rig?
73, Fred
k6kub

# 349. Re: [SS-40] Power Switch

Yahoo group: SS-40
Date: 2012-01-03 19:24:19 UTC
From: Jim Kortge
Topic: 348  Message: 349

On 1/3/2012 12:52 AM, fred wrote:
> I was wondering if the SS-40 was intended to be powered-up by just plugging in a power cord or if anyone has installed an on/off switch on the rig?
> 73, Fred
> k6kub
>

Greetings Fred,

Mine powers up when I turn on its power supply. Hence, no need for a power switch and no room on the PCB front to put one either.

72,

Jim, K8IQY

# 350. Re: [SS-40] Power Switch

Yahoo group: SS-40
Date: 2012-01-03 21:44:56 UTC
From: blackbelair
Topic: 348  Message: 350

Ok. And I assume the same is true for the NS-40?
73, Fred
k6kub

---
From: Jim Kortge <jim.k8iqy@...>
To: SS-40@yahoogroups.com
Cc: fred <blackbelair@...>
Sent: Tuesday, January 3, 2012 11:24 AM
Subject: Re: [SS-40] Power Switch

On 1/3/2012 12:52 AM, fred wrote:
> I was wondering if the SS-40 was intended to be powered-up by just plugging in a power cord or if anyone has installed an on/off switch on the rig?
> 73, Fred
> k6kub
>

Greetings Fred,

Mine powers up when I turn on its power supply. Hence, no need for a power switch and no room on the PCB front to put one either.

72,

Jim, K8IQY

# 351. Re: [SS-40] Power Switch

Yahoo group: SS-40
Date: 2012-01-03 22:12:44 UTC
From: Jim Kortge
Topic: 348  Message: 351

On 1/3/2012 4:44 PM, blackbelair wrote:
> Ok. And I assume the same is true for the NS-40?
> 73, Fred
> k6kub
>

I can't speak for Dave Cripe, but I'm guessing he was sort of thinking
the say way. Maybe he will jump in here with a comment or two.

72,

Jim, K8IQY

# 352. Re: [SS-40] Power Switch

Yahoo group: SS-40
Date: 2012-01-03 23:04:55 UTC
From: WA0ITP
Topic: 348  Message: 352

Yes, but switch it if you'd like to.
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...m
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: blackbelair
To: SS-40@yahoogroups.com
Sent: Tuesday, January 03, 2012 3:44 PM
Subject: Re: [SS-40] Power Switch

Ok. And I assume the same is true for the NS-40?
73, Fred
k6kub

---
From: Jim Kortge <jim.k8iqy@...>
To: SS-40@yahoogroups.com
Cc: fred <blackbelair@...>
Sent: Tuesday, January 3, 2012 11:24 AM
Subject: Re: [SS-40] Power Switch

On 1/3/2012 12:52 AM, fred wrote:
> I was wondering if the SS-40 was intended to be powered-up by just plugging in a power cord or if anyone has installed an on/off switch on the rig?
> 73, Fred
> k6kub
>

Greetings Fred,

Mine powers up when I turn on its power supply. Hence, no need for a power switch and no room on the PCB front to put one either.

72,

Jim, K8IQY

# 353. Add the S-Meter

Yahoo group: SS-40
Date: 2012-01-18 12:00:26 UTC
From: Hide
Topic: 353  Message: 353

Hi all.
I've almost finished to build SS-40 and I have a plan
to add the Ten Turn POT for VXO Tuning,Frequency Counter
and the S-meter.

And I have a question about how to add the S-meter.

Does anyone add these option?

ja9mat Hidehiko.

# 354. Can this radio tune to W1AW

Yahoo group: SS-40
Date: 2012-01-18 19:38:06 UTC
From: tlcfarmer@yahoo.com
Topic: 354  Message: 354

I like this little radio's spec's. But, the documents indicate that the tuning range is a little short of getting up to 7047.50 used by W1AW.

Is it possible to tweak this thing far enough to get to that freq?

If so, I will probably buy one, use it for a while and then loan/give it to a friend who has a extra class license but is waiting until he has about $50,000 to spend on the that super perfect station. (Not kidding, he is like that, super perfect perfectionist, even his wife gives him grief over it). I want this thing to show him that it does not take a FT-9000 to make a contact or hear someone!

Lincoln
N9IN

# 355. Re: Can this radio tune to W1AW

Yahoo group: SS-40
Date: 2012-01-18 19:50:12 UTC
From: Stephen Farthing
Topic: 354  Message: 355

There use to be a Catholic Priest who posted to QRP-L. He claimed to spend $10 a year on Ham Radio....you should tell your perfectionist pal about him. I can't remember his callsign. I wonder if he became a silent key?

73s from a cold and rainy England

Steve G0XAR

--
Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful. E. F. Schumacher

# 356. Re: [SS-40] Can this radio tune to W1AW

Yahoo group: SS-40
Date: 2012-01-18 20:08:36 UTC
From: WA0ITP
Topic: 354  Message: 356

Hi Lincoln,

The range can be changed somewhat. In the archives there is a message or two by some who did it. I'm not sure whether they went up or down in freq. It will take some experimentation to determine exactly what's needed in your case. Google VXOs to determine things to try, there is lots of info out there.

---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: <tlcfarmer@...>
To: <SS-40@yahoogroups.com>
Sent: Wednesday, January 18, 2012 1:38 PM
Subject: [SS-40] Can this radio tune to W1AW

|I like this little radio's spec's. But, the documents indicate that the tuning range is a little short of getting up to 7047.50 used by W1AW.
|
| Is it possible to tweak this thing far enough to get to that freq?
|
| If so, I will probably buy one, use it for a while and then loan/give it to a friend who has a extra class license but is waiting until he has about $50,000 to spend on the that super perfect station. (Not kidding, he is like that, super perfect perfectionist, even his wife gives him grief over it). I want this thing to show him that it does not take a FT-9000 to make a contact or hear someone!
|
| Lincoln
| N9IN
|
|
|
| ---
|
| Yahoo! Groups Links
|
|

|

# 357. Re: [SS-40] Can this radio tune to W1AW

Yahoo group: SS-40
Date: 2012-01-18 21:16:14 UTC
From: Jim Kortge
Topic: 354  Message: 357

On 1/18/2012 2:38 PM, tlcfarmer@... wrote:
> I like this little radio's spec's. But, the documents indicate that the tuning range is a little short of getting up to 7047.50 used by W1AW.

That's correct with the parts supplied with the kit, which were optimized to cover 7.030 and 7.040 MHz.
>
> Is it possible to tweak this thing far enough to get to that freq?

Yes. One can reduce the size of the inductor in series with the VXO crystals and make it tune up higher. With no inductance in series, i.e. a short across where it would be installed, mine will tune up to 7.0555 MHz. It doesn't tune down very far from that though. With the right inductor (an exercise for the student), one should be able to get up to 7.0475 and probably still hit 7.040 MHz. Probably something on the order of 2.7 uH would be a good starting point, but that is just a guess.

>
> If so, I will probably buy one, use it for a while and then loan/give it to a friend who has a extra class license but is waiting until he has about $50,000 to spend on the that super perfect station. (Not kidding, he is like that, super perfect perfectionist, even his wife gives him grief over it). I want this thing to show him that it does not take a FT-9000 to make a contact or hear someone!
>

It is probably as sensitive as an FT-9000, but again, a guess. I don't have one of those to compare it against.

> Lincoln
> N9IN

72 Lincoln, and have fun,

Jim, K8IQY

# 358. SS-40 works fine!

Yahoo group: SS-40
Date: 2012-01-20 08:59:06 UTC
From: Hide
Topic: 358  Message: 358

I've accomplished to build the SS-40,it take a long time to finish
because of my hard working..hi
It takes about 1week I spend 1 or 2hour every night.
The difficult part is VXO output level, i can not get 7V-pp at peak
but I know it's may be a mistake of writing. I can only get 3.5Vpp
at the peak and still leave this value into the DBM mixer, but I'm
afraid it's heavy level for DBM input or not.

The Sensitivity is good and also as Selectivity.
Some QRPp and DX stations can be heard this evening.
AGC is very suitable for this radio, sounds very softly, I like.

I add the 10-turn/20k POT and I modified L9 to homemade inductor
about 7 to 8 uH. I can tune from 6998kHz to 7035kHz all over domestic
CW band including QRP-Spot frequency. I feel no QRH and it's a Low Noise
VXO.

Well I have a plan to add the DL4YHF's famous Frequency Counter and
the S-meter.
Any suggestions are welcome.
Have a nice weekend.

ja9mat Hidehiko.

# 359. Re: [SS-40] SS-40 works fine!

Yahoo group: SS-40
Date: 2012-01-20 14:10:49 UTC
From: WA0ITP
Topic: 358  Message: 359

Hello Hidehiko-san

Thanks for the post and I'm glad you're enjoying the receiver. I'm also happy to hear that you are able to cover your CW portion of the band so well. Please let us know how the counter and S meter mods work out.

---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Hide" <qrper72@...>
To: <SS-40@yahoogroups.com>
Sent: Friday, January 20, 2012 2:59 AM
Subject: [SS-40] SS-40 works fine!

| I've accomplished to build the SS-40,it take a long time to finish
| because of my hard working..hi
| It takes about 1week I spend 1 or 2hour every night.
| The difficult part is VXO output level, i can not get 7V-pp at peak
| but I know it's may be a mistake of writing. I can only get 3.5Vpp
| at the peak and still leave this value into the DBM mixer, but I'm
| afraid it's heavy level for DBM input or not.
|
| The Sensitivity is good and also as Selectivity.
| Some QRPp and DX stations can be heard this evening.
| AGC is very suitable for this radio, sounds very softly, I like.
|
| I add the 10-turn/20k POT and I modified L9 to homemade inductor
| about 7 to 8 uH. I can tune from 6998kHz to 7035kHz all over
domestic
| CW band including QRP-Spot frequency. I feel no QRH and it's a Low
Noise
| VXO.
|
| Well I have a plan to add the DL4YHF's famous Frequency Counter and
| the S-meter.
| Any suggestions are welcome.
| Have a nice weekend.
|

```
| ja9mat Hidehiko.
|
|
|
| ------------------------------------
|
| Yahoo! Groups Links
|
|
|
```

# 360. Re: SS-40 works fine!

Yahoo group: SS-40
Date: 2012-01-21 00:06:52 UTC
From: Hide
Topic: 358  Message: 360

Hello Terry,

Thanks for reply.
Yes, I will experiment to add them.
And I will make the 2nd NS-40 transmitter for this receiver.
Because my 1st NS-40 is used for the another transceiver with AM modification.
I will post again when finished these dream.

Thanks again for the nice projects and looking forward the next kit.

ja9mat Hidehiko.

> Please let us know how the counter and S meter mods
> work out.

# 361. 386BO

Yahoo group: SS-40
Date: 2012-01-25 14:39:29 UTC
From: davidmccreery62
Topic: 361  Message: 361

A question from a rank beginner: when installing the 386BO for the audio chain does the spot on top of the chip go toward the notch of the socket as the photo seems to indicate or away? I think that I installed it incorrectly ... I should have looked more closely at the picture! Dave

# 362. Re: [SS-40] 386BO

Yahoo group: SS-40
Date: 2012-01-25 14:47:19 UTC
From: Jim Kortge
Topic: 361  Message: 362

On 1/25/2012 9:39 AM, davidmccreery62 wrote:
> A question from a rank beginner: when installing the 386BO for the audio chain does the spot on top of the chip go toward the notch of the socket as the photo seems to indicate or away? I think that I installed it incorrectly ... I should have looked more closely at the picture! Dave
>

Dave,

The notch in the chip should line up with the notch in the socket.

72,

Jim, K8IQY

# 363. Re: [SS-40] 386BO

Yahoo group: SS-40
Date: 2012-01-25 20:11:18 UTC
From: Jim Kortge
Topic: 361  Message: 363

On 1/25/2012 9:47 AM, Jim Kortge wrote:
> On 1/25/2012 9:39 AM, davidmccreery62 wrote:
>> A question from a rank beginner: when installing the 386BO for the
>> audio chain does the spot on top of the chip go toward the notch of
>> the socket as the photo seems to indicate or away? I think that I
>> installed it incorrectly ... I should have looked more closely at
>> the picture! Dave
>>
>
> Dave,
>
> The notch in the chip should line up with the notch in the socket.
>
> 72,
>
> Jim, K8IQY
>
>
>

Maybe I should be more detailed. The 386 IC has a small dot indent on the top adjacent to pin 1. The notch on the socket is between pin 1 and pin 8. The 386 IC goes in with the small dot on top adjacent to pin 1 on the socket. I can put up a detailed photo if that would be helpful. Ditto for the other ICs.

72,

Jim, K8IQY

# 364. Re: 386BO

Yahoo group: SS-40
Date: 2012-01-26 01:37:48 UTC
From: davidmccreery62
Topic: 361  Message: 364

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 1/25/2012 9:47 AM, Jim Kortge wrote:
> > On 1/25/2012 9:39 AM, davidmccreery62 wrote:
> >> A question from a rank beginner: when installing the 386BO for the
> >> audio chain does the spot on top of the chip go toward the notch of
> >> the socket as the photo seems to indicate or away? I think that I
> >> installed it incorrectly ... I should have looked more closely at
> >> the picture! Dave
> >>
> >
> > Dave,
> >
> > The notch in the chip should line up with the notch in the socket.
> >
> > 72,
> >
> > Jim, K8IQY
> >
> >
> >
>
>
> Maybe I should be more detailed. The 386 IC has a small dot indent on
> the top adjacent to pin 1. The notch on the socket is between pin 1
> and pin 8. The 386 IC goes in with the small dot on top adjacent to
> pin 1 on the socket. I can put up a detailed photo if that would be
> helpful. Ditto for the other ICs.
>
> 72,
>
> Jim, K8IQY
>
Thanks. I have it now. Dave

# 365. Re: [SS-40] Re: 386BO

Yahoo group: SS-40
Date: 2012-01-26 01:50:06 UTC
From: Brock Winfrey
Topic: 361  Message: 365

Whenever I have any chips to install I install a socket for it.  It saves a lot of headaches later.

Sincerely, Brock Winfrey

--- On Wed, 1/25/12, davidmccreery62 <davidmccreery62@...> wrote:

From: davidmccreery62 <davidmccreery62@...>
Subject: [SS-40] Re: 386BO
To: SS-40@yahoogroups.com
Date: Wednesday, January 25, 2012, 8:37 PM

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:

>

> On 1/25/2012 9:47 AM, Jim Kortge wrote:

> > On 1/25/2012 9:39 AM, davidmccreery62 wrote:

> >> A question from a rank beginner: when installing the 386BO for the

> >> audio chain does the spot on top of the chip go toward the notch of

> >> the socket as the photo seems to indicate or away? I think that I

> >> installed it incorrectly ... I should have looked more closely at

> >> the picture! Dave

> >>

> >

> > Dave,

> >

> > The notch in the chip should line up with the notch in the socket.

> >

> > 72,

> >

> > Jim, K8IQY

> >

> >

> >

>

>

> Maybe I should be more detailed. The 386 IC has a small dot indent on

> the top adjacent to pin 1. The notch on the socket is between pin 1

> and pin 8. The 386 IC goes in with the small dot on top adjacent to

> pin 1 on the socket. I can put up a detailed photo if that would be

> helpful. Ditto for the other ICs.

>

> 72,

>

> Jim, K8IQY

>

Thanks. I have it now. Dave

# 367. SS-40 Mods Testing

Yahoo group: SS-40
Date: 2012-01-29 07:23:26 UTC
From: Hide
Topic: 367  Message: 367

Hi,

I've finished the Mods for SS-40 receiver as follows;

1) Added the famous "Frequency Counter by DL4YHF"
http://www.qsl.net/dl4yhf/freq_counter/freq_counter.html

2) G-QRP Club's Audio S-meter kit
http://www.southgatearc.org/qrp/audiometer.htm
with 10-LED Array
http://jsdiy.web.fc2.com/lm3916_15_14/lm3915fig1.png

3) L9 was replaced with inductor with ferrite coil (changeable from 5 to 10uH)
and it makes the frequency coverage from 6,998kHz to 7,035kHz

4) 5k-Pot was replaced with 20k-10 turn Pot for easier VXO tuning

Well I've uploaded the movie file on to my Blog as follows;
http://qrper72.blogspot.com/

It remains casing ... I'll report again when finish to build in.
73,ja9mat Hidehiko.

# 368. RE: [SS-40] SS-40 Mods Testing

Yahoo group: SS-40
Date: 2012-01-29 10:19:38 UTC
From: Jake, ON4YZ
Topic: 367  Message: 368

Hi Hide,

I can't get access to your blog as it seems that I haven't been invited to.
I'd like to see your movie. What can I do ?

73 de Jake - ON4YZ

Well I've uploaded the movie file on to my Blog as follows;
http://qrper72.blogspot.com/

# 369. Re: SS-40 Mods Testing

Yahoo group: SS-40
Date: 2012-01-29 10:37:20 UTC
From: Hide
Topic: 367  Message: 369

Hi Jake, Sorry...I change the property now please try!
But it's a shanty style not beautiful. hi.

ja9mat hidehiko

--- In SS-40@yahoogroups.com, "Jake, ON4YZ" <jacques.matlet@...> wrote:
>
> Hi Hide,
>
> I can't get access to your blog as it seems that I haven't been invited to.
> I'd like to see your movie. What can I do ?
>
> 73 de Jake - ON4YZ
>
>
>
> Well I've uploaded the movie file on to my Blog as follows;
> http://qrper72.blogspot.com/
>

# 370. RE: [SS-40] Re: SS-40 Mods Testing

Yahoo group: SS-40
Date: 2012-01-29 12:03:09 UTC
From: Jake, ON4YZ
Topic: 367  Message: 370

Brilliant, Hide. Superb sound.

Jake - ON4YZ

> http://qrper72.blogspot.com/

# 371. audio chain

Yahoo group: SS-40
Date: 2012-01-31 14:30:31 UTC
From: davidmccreery62
Topic: 371  Message: 371

OK. More help needed here! I apparently initially installed the LM 386 in the audio chain incorrectly and was rewarded with a brief burst of noise -- not 60 cycle hum but static noise -- followed by silence. I purchased and installed another LM 386 ... but still silence. Do I now start replacing the electolytic capacitors? Any suggestions on the sequence? As I always say, life is definately harder when you are stupid! Dave

# 372. Re: [SS-40] audio chain

Yahoo group: SS-40
Date: 2012-01-31 15:20:53 UTC
From: Brock Winfrey
Topic: 371  Message: 372

Repairing a foul up like this separates the hams from the operators.  The men from the boys.  Hang in there.  This is an opportunity to learn.  I'm not working on that project so I'll leave the advice to those in the know.

Sincerely, Brock Winfrey

--- On Tue, 1/31/12, davidmccreery62 <davidmccreery62@...> wrote:

From: davidmccreery62 <davidmccreery62@...>
Subject: [SS-40] audio chain
To: SS-40@yahoogroups.com
Date: Tuesday, January 31, 2012, 9:30 AM

OK. More help needed here! I apparently initially installed the LM 386 in the audio chain incorrectly and was rewarded with a brief burst of noise -- not 60 cycle hum but static noise -- followed by silence. I purchased and installed another LM 386 ... but still silence. Do I now start replacing the electolytic capacitors? Any suggestions on the sequence? As I always say, life is definately harder when you are stupid! Dave

# 373. Re: [SS-40] audio chain

Yahoo group: SS-40
Date: 2012-02-01 13:37:34 UTC
From: Jim Kortge
Topic: 371  Message: 373

On 1/31/2012 9:30 AM, davidmccreery62 wrote:
> OK. More help needed here! I apparently initially installed the LM 386 in the audio chain incorrectly and was rewarded with a brief burst of noise -- not 60 cycle hum but static noise -- followed by silence.

While I have not tried putting a LM386 in backwards, looking at the chip makes me wonder why it would be damaged. Maybe I'm not seeing something that is obvious.

I purchased and installed another LM 386 ... but still silence.

That's very interesting!

Do I now start replacing the electolytic capacitors?

I don't think so. Again, looking at the pinout of the chip in a reversed position, I don't see anything that should be severely damaged.

Any suggestions on the sequence? As I always say, life is definately harder when you are stupid! Dave

I think the apparent non-functioning of the LM386 may well be due to a cold solder joint on the socket or elsewhere. That's why it is not working with the new chip, or the new chip is defective. If I remember correctly, there are various voltage versions of the LM386. The one used in the SS-40 receiver is good up to 18 volts. Maybe that is an issue?

72,

Jim, K8IQY

# 374. Audio chain

Yahoo group: SS-40
Date: 2012-02-01 16:14:58 UTC
From: davidmccreery62
Topic: 374  Message: 374

Thanks for the encouragement, help, and patience. I recehecked the various joint, redid those that seem dubious, and it is now working = 60 hum and various local radio stations! There is still an intermittent connected with the volume control but I am working on that. Thanks again ... and no doubted I'll be back! Dave

# 375. My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-13 12:28:25 UTC
From: Hide
Topic: 375  Message: 375

Hi,

I've finished casing and upload 2 of videos as below;

http://qrper72.blogspot.com/

Nice Receiver, I'm satisfied its performance.

ja9mat Hidehiko.

# 376. Re: [SS-40] My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-13 18:19:13 UTC
From: WA0ITP
Topic: 375  Message: 376

Very nice job Hide!! Your enclosure looks perfect for the SS-40 and
counter display. Thnak you for sharing it.
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Hide" <qrper72@...>
To: <SS-40@yahoogroups.com>
Sent: Monday, February 13, 2012 6:28 AM
Subject: [SS-40] My SS-40 finished !

| Hi,
|
| I've finished casing and upload 2 of videos as below;
|
| http://qrper72.blogspot.com/
|
| Nice Receiver, I'm satisfied its performance.
|
| ja9mat Hidehiko.
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 377. Re: [SS-40] My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-13 21:11:00 UTC
From: Lee Mairs (SAG)
Topic: 375  Message: 377

You have a very interesting website and you SS-40 works great. I have one of these kits, but I am afraid I'm too shaky now to build it. Maybe.

Very interesting software of digital modes that I wasn't aware of. I will have to check them out.
73 de Lee
KM4YY
Romney, WV

On 2/13/2012 7:28 AM, Hide wrote:
>
> Hi,
>
> I've finished casing and upload 2 of videos as below;
>
> http://qrper72.blogspot.com/
>
> Nice Receiver, I'm satisfied its performance.
>
> ja9mat Hidehiko.
>
>

# 378. Re: [SS-40] My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-13 21:43:05 UTC
From: Jim Kortge
Topic: 375  Message: 378

Dear Hide,

What a treat to see your SS-40 in the case with the display running and copying DX stations! Terrific! Your rig sure sounds great in the two videos that you put up. Keep up the good work!

72 and good DX,

Jim, K8IQY

# 379. Re: My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-18 01:10:07 UTC
From: katsumi.seto
Topic: 375  Message: 379

Hi Hide

I wonder how you have done with your S-meter. It is very nice. I would like to copy it. Could you please share it with me?

de ja7qil/katsu

--- In SS-40@yahoogroups.com, "Hide" <qrper72@...> wrote:
>
> Hi,
>
> I've finished casing and upload 2 of videos as below;
>
> http://qrper72.blogspot.com/
>
> Nice Receiver, I'm satisfied its performance.
>
> ja9mat Hidehiko.
>

# 380. Re: My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-18 01:19:24 UTC
From: katsumi.seto
Topic: 375  Message: 380

My 1st SS-40 finished, too!

I informed Terry out of joy last night. I am satisfied its performance too.

Front View
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0601.jpg
Rear View
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0602.jpg
Inside View
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0603.jpg

de ja7qil/katsu

--- In SS-40@yahoogroups.com, "Hide" <qrper72@...> wrote:
>
> Hi,
>
> I've finished casing and upload 2 of videos as below;
>
> http://qrper72.blogspot.com/
>
> Nice Receiver, I'm satisfied its performance.
>
> ja9mat Hidehiko.
>

# 381. Re: [SS-40] Re: My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-18 02:21:53 UTC
From: Jim Kortge
Topic: 375  Message: 381

On 2/17/2012 8:19 PM, katsumi.seto wrote:
> My 1st SS-40 finished, too!
>
> I informed Terry out of joy last night. I am satisfied its performance too.
>
> Front View
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0601.jpg
> Rear View
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0602.jpg
> Inside View
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0603.jpg
>
> de ja7qil/katsu

Dear Katsu,

Great job building and packaging your SS-40 receiver. Looks very professional. I really like the tuning indicator and drive behind it. Nice!! :-)

72 and kind regards,

Jim, K8IQY

# 382. Re: My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-18 07:49:10 UTC
From: Hide
Topic: 375  Message: 382

Hi Katsumi,

Looks so beautiful and I'm very interested in your S-Meter.
Where did you put the S-Meter?
Into hte AGC circuit or???
Because I retired to put the S-Meter into the AGC circuit,
it's the bet way I think.

ja9mat Hidehiko.

--- In SS-40@yahoogroups.com, "katsumi.seto" <katsumi.seto@...> wrote:
>
> My 1st SS-40 finished, too!
>
> I informed Terry out of joy last night. I am satisfied its performance too.
>
> Front View
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0601.jpg
> Rear View
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0602.jpg
> Inside View
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0603.jpg
>
> de ja7qil/katsu
>
> --- In SS-40@yahoogroups.com, "Hide" <qrper72@> wrote:
> >
> > Hi,
> >
> > I've finished casing and upload 2 of videos as below;
> >
> > http://qrper72.blogspot.com/
> >
> > Nice Receiver, I'm satisfied its performance.
> >
> > ja9mat Hidehiko.
> >
>

# 383. Re: My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-18 09:08:20 UTC
From: katsumi.seto
Topic: 375  Message: 383

Hi Hide

I am not sure which point is the best for picking up the AGC current. I hooked it up at the base of Q6. Where in the AGC circuit did you hook it up??

This meter is actually one of the "FCZ" kits, called "S Mieta". zIt comes with one transistor, 2SC1815 to amplify the current.

de ja7qil/katsu

--- In SS-40@yahoogroups.com, "Hide" <qrper72@...> wrote:
>
> Hi Katsumi,
>
> Looks so beautiful and I'm very interested in your S-Meter.
> Where did you put the S-Meter?
> Into hte AGC circuit or???
> Because I retired to put the S-Meter into the AGC circuit,
> it's the bet way I think.
>
> ja9mat Hidehiko.
>
> --- In SS-40@yahoogroups.com, "katsumi.seto" <katsumi.seto@> wrote:
> >
> > My 1st SS-40 finished, too!
> >
> > I informed Terry out of joy last night. I am satisfied its performance too.
> >
> > Front View
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0601.jpg
> > Rear View
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0602.jpg
> > Inside View
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0603.jpg
> >
> > de ja7qil/katsu
> >
> > --- In SS-40@yahoogroups.com, "Hide" <qrper72@> wrote:
> > >
> > > Hi,
> > >
> > > I've finished casing and upload 2 of videos as below;
> > >
> > > http://qrper72.blogspot.com/
> > >
> > > Nice Receiver, I'm satisfied its performance.

> > >
> > > ja9mat Hidehiko.
> > >
> >
>

# 384. Re: My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-18 11:20:08 UTC
From: Hide
Topic: 375  Message: 384

OKay Katsu,

Well I know the "S-Miea" and I will also try to connect the
small 500uA meter into where you mentioned, thanks!

Did you receive my Japanese e-mail?

ja9mat Hidehiko.

> I am not sure which point is the best for picking up the AGC current. I hooked it up at the base of Q6. Where in the AGC circuit did you hook it up??

# 385. kit for beginner?

Yahoo group: SS-40
Date: 2012-02-18 15:55:43 UTC
From: Steve Eisenberg
Topic: 385  Message: 385

Hi, All:

Is the SS-40 too complex for a beginner? The NS-40 looks a lot simpler.

Thanks!

73,

Steve
KA1ZFY

# 386. Re: [SS-40] kit for beginner?

Yahoo group: SS-40
Date: 2012-02-18 16:02:45 UTC
From: WA0ITP
Topic: 385  Message: 386

GM Steve,

YOur correct, the NS-40 is much simpler, and I advise building it first. mainly becaise it has fewer parts. The SS-40 is an easy build also, just more parts and takes a little longer. I'm sure you will do well with whichever one you choose, and both have support groups on Yahoo.
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Steve Eisenberg" <chobers@...>
To: <SS-40@yahoogroups.com>
Sent: Saturday, February 18, 2012 9:55 AM
Subject: [SS-40] kit for beginner?

| Hi, All:
|
| Is the SS-40 too complex for a beginner? The NS-40 looks a lot
simpler.
|
| Thanks!
|
| 73,
|
| Steve
| KA1ZFY
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 387. Re: [SS-40] kit for beginner?

Yahoo group: SS-40
Date: 2012-02-18 16:15:56 UTC
From: Stephen Farthing
Topic: 385  Message: 387

Guys,

I think the SS-40 is great for a beginner. It has a nice large PCB, through hole parts, a great clear manual and if you get into trouble a great bunch of people to help you out on this list.....

I don't think you should be intimidated by it at all. My first real radio was a Norcal 40 A, I knew the square root of nothing about radio and soldering but managed to get on the air with it for my first contact as a ham.....

Also the SS-40 has very good performance, one of the troubles of simpler rigs is that they often don't cut it, another thing is that if the homebrew bug bites you get the other two kits...the Class E TX and the control thingy and you have a station you made yourself that will make you many contacts...

So, in my view, send off the money, get the kit, build it and above all. have fun....

I hope it is warmer in the USA than it is in England....

73s Steve G0XAR

--
Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful. E. F. Schumacher

# 388. Re: [SS-40] kit for beginner?

Yahoo group: SS-40
Date: 2012-02-18 16:22:39 UTC
From: Steve Eisenberg
Topic: 385  Message: 388

Thanks, Terry. I have an MKARS-80 in the box which I've been holding off on; the complexity of SS-40 reminds of it.

The transmitter is pretty simple-looking, so I guess I will start with that.

I read that the T-R (magic) box is unavailable until after a convention, but I suspect that hooks the tx and rx units together, so eventually I'll need one of those.

What I need more than anything is to learn to SOLDER. I melt the plastic in a PL-259.

73,

Steve
KA1ZFY

On Sat, Feb 18, 2012 at 11:02 AM, WA0ITP <wa0itp@...> wrote:

> **
>
>
> GM Steve,
>
> YOur correct, the NS-40 is much simpler, a
> |
>

# 389. Re: [SS-40] kit for beginner?

Yahoo group: SS-40
Date: 2012-02-18 16:39:14 UTC
From: WA0ITP
Topic: 385  Message: 389

Hi Steve,

"the square root of nothing" :o)

I gotta remember that one, I love it!!
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Stephen Farthing
To: SS-40@yahoogroups.com
Sent: Saturday, February 18, 2012 10:15 AM
Subject: Re: [SS-40] kit for beginner?

Guys,

I think the SS-40 is great for a beginner. It has a nice large PCB, through hole parts, a great clear manual and if you get into trouble a great bunch of people to help you out on this list.....

I don't think you should be intimidated by it at all. My first real radio was a Norcal 40 A, I knew the square root of nothing about radio and soldering but managed to get on the air with it for my first contact as a ham.....

Also the SS-40 has very good performance, one of the troubles of simpler rigs is that they often don't cut it, another thing is that if the homebrew bug bites you get the other two kits...the Class E TX and the control thingy and you have a station you made yourself that will make you many contacts...

So, in my view, send off the money, get the kit, build it and above all. have fun....

I hope it is warmer in the USA than it is in England....

73s Steve G0XAR

--

Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful. E. F.

Schumacher

# 390. Re: [SS-40] kit for beginner?

Yahoo group: SS-40
Date: 2012-02-18 17:12:11 UTC
From: WA0ITP
Topic: 385  Message: 390

The MKARS 80 is quite a bit more complex than the SS-40. I have one but it wasn't easy to put on CW so I haven't used it.

The SS-40 and an NS-40, with the MagicBox in between makes for an excellent homebrew station. Add the SAVXO to the NS-40 for some frequency agility and you have a very capable 40M station. Some of the guys refer to it as the Four State Trio. Quad if you include the SAVXO :o)

You can build with confidence as all of our kits have support groups on Yahoo Groups. These are a great place to ask any question you might have as you build.

Thank you for your interest in the Four State Kits.

---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Steve Eisenberg
To: SS-40@yahoogroups.com
Sent: Saturday, February 18, 2012 10:22 AM
Subject: Re: [SS-40] kit for beginner?

Thanks, Terry. I have an MKARS-80 in the box which I've been holding off on; the complexity of SS-40 reminds of it.

The transmitter is pretty simple-looking, so I guess I will start with that.

I read that the T-R (magic) box is unavailable until after a convention, but I suspect that hooks the tx and rx units together, so eventually I'll need one of those.

What I need more than anything is to learn to SOLDER. I melt the plastic in a PL-259.

73,

Steve
KA1ZFY

On Sat, Feb 18, 2012 at 11:02 AM, WA0ITP <wa0itp@mchsi.com> wrote:

GM Steve,

YOur correct, the NS-40 is much simpler, a

|

# 391. Re: [SS-40] kit for beginner?

Yahoo group: SS-40
Date: 2012-02-18 17:14:46 UTC
From: Steve Eisenberg
Topic: 385  Message: 391

Ola, Steve in Merrie Olde England:

Thanks for your input. I think I will start with the transmitter and see if it works and how much of a mess I make. Then I'll move on to the rcvr and the Magic Box. I was planning to build all of them anyway. I am excited about the prospect of building a rcvr with better specs than many commercial rigs.

Have you seen an MKARS-80? Looks kind of complex to me.

Thanks and 73,

Steve
KA1ZFY
State 'o Maine

> Subject: Re: [SS-40] kit for beginner?
>
> Guys,
>
> I think the SS-40 is great for a beginner.
>

# 392. Re: [SS-40] kit for beginner? Also: needed instruments for construction

Yahoo group: SS-40
Date: 2012-02-18 17:21:54 UTC
From: Steve Eisenberg
Topic: 392  Message: 392

Yep, that's what I thought, Terry. The MKARS is in its unopened box waiting until I find out what I'm doing. I know they came out later with a CW board for it, so it could be a versatile little unit. I don't know too much about specs so I can't compare it to the SS-40. I do know that there is a very active MKARS group and a lot of help available.

I am planning to buy one of those tiny electronics tool kits, a multimeter, and a soldering setup. Do I need anything else, besides one of those PCB vices, and maybe a big magnifier?

Thanks,

Steve
KA1ZFY

On Sat, Feb 18, 2012 at 12:12 PM, WA0ITP <wa0itp@...> wrote:

> **
>
>
> **
> *The MKARS 80 is quite a bit more complex than the SS-40.*
>

# 393. FW: [SS-40] kit for beginner? Also: needed instruments for construction

Yahoo group: SS-40
Date: 2012-02-18 18:02:45 UTC
From: Stephen W. Szabo
Topic: 393  Message: 393

Hi Steve,

Need anything else?? But of course you do!!! (More toys and stuff.. Hi hi hi !!).

A good magnifier...accompanied by a GREAT light!

My bench has one of those magnifier/lamp combos - I have a 100W "daylight" CFL in it (only draws 13W and stays pretty "cool" - plus it is a "bright white light") with a 3X magnifier.

Once adjusted over the board it makes for really easy soldering and inspection. I use it when I do initial parts inventory to help identify components and color codes at the start of a project - then sorting them in order of value (I check them again when I install the part - always better to check again before soldering!!!!) Walmart and other stores retail these lights at $50.00. A long term, wise investment!

Make sure your "soldering setup" has the right size tip and temp for circuit board work (very small for this type of work - not a 100W soldering pistol!!) and you clean the tip on a damp sponge often.

I strongly recommend small diagonal or "snipping" pliers for cutting off leads, tweezers for picking up and handling small parts (I use the dental 5" with the pointed ends - get them at flea markets/hamfests for a buck or two).

Use a "hobby pad" (a "self-healing" cutting pad, model builders pad - I have a 20x30 Hobbico modellers pad) to protect your work area and the green color makes for finding small parts easy!

As for them small parts..an egg container (12 or 18 egg size) emptied (of course!) works good, or a piece of corrugated cardboard with leads placed in the "holes". Or anything else that has multiple compartments that has enough weight not to fly around the bench.

Some other kit building ideas...(yeah, I 've built a few kits in my time....hi hi hi!)

Work in an uncluttered environment.

Give yourself ample room to work.

Have the room temp comfortable. Too cold, too hot, or high humidity (or any other combo that makes for discomfort) with not only detract, but sweat falling on a board when working is really icky.

I use the little bottles of alcohol gel and "wash" my hands every so often (and I use a towel to finish) - handing this stuff can get your hands pretty dirty, greasy, sticky..you get the idea.

Have a subtle "distraction" like an FM radio (or iPod, XM radio) in the background. I have an AM/FM iPod radio with digital clock/alarm above my bench on a shelf. When kit building the background music is relaxing!!! Don't have it blasting, just enough to hear at a comfortable level. I also set the alarm for either 75 minutes, or a fixed target time to either quit or take a break. No kidding, I have gone several hours at a clip, losing track of time. (I once was building a Heathkit HG-10B VFO back in the day at the kitchen table, starting after dinner, around 8pm. After one bathroom break at midnight, next thing I knew it was 4:30 am. Not good when you go to work at 6am on a 12-hour shift!!). Pace yourself and pick times you don't have other stuff competing for your attention.

OK, I got long winded. Kit building is one of the most rewarding parts of our hobby. And it is amazing (and really, really makes you feel proud) to see the look on someone's face when you tell them you built it - and it works great!

The 4SQRP kits are well supported, and excellent kits. You'll also find they perform really well.

I'm sure some of the other folks may be adding other items. While not "needed", they sure make for a better experience (and end result!)

But above all....HAVE FUN!!!!!

73,

Steve WB4OMM

From: Steve Eisenberg [mailto:chobers@...]
Sent: Saturday, February 18, 2012 12:22 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] kit for beginner? Also: needed instruments for construction

Yep, that's what I thought, Terry. The MKARS is in its unopened box waiting until I find out what I'm doing. I know they came out later with a CW board for it, so it could be a versatile little unit. I don't know too much about specs so I can't compare it to the SS-40. I do know that there is a very active MKARS group and a lot of help available.

I am planning to buy one of those tiny electronics tool kits, a multimeter, and a soldering setup. Do I need anything else, besides one of those PCB vices, and maybe a big magnifier?

Thanks,

Steve

KA1ZFY

On Sat, Feb 18, 2012 at 12:12 PM, WA0ITP <wa0itp@...> wrote:

The MKARS 80 is quite a bit more complex than the SS-40.

# 394. Re: FW: [SS-40] kit for beginner? Also: needed instruments for construction

Yahoo group: SS-40
Date: 2012-02-18 18:34:52 UTC
From: Steve Eisenberg
Topic: 393  Message: 394

Hi, Steve:

Long-winded, are you kidding? This is solid gold for a baby beginner like myself.

My Ft-817ND is more susceptible to noise than my Uniden Grant XL SSB CB rig from the late 80s. I'm looking forward to seeing how the SS-40 stacks up.

I will look for some of the stuff you mentioned; I figured I'd have to drop some bucks on equipment before I bought the actual kit.

Thanks very much for taking the time to run all of that down for me; this email goes into my "kits" folder.

73,

Steve
KA1ZFY

On Sat, Feb 18, 2012 at 1:02 PM, Stephen W. Szabo <sszabo1@...>wrote:

> **
>
>
> Hi Steve,****
>
> ** **
>
> Need anything else?? But of course you do!!!
>

# 395. SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-18 20:14:39 UTC
From: WA0ITP
Topic: 395  Message: 395

I'd like get a good estimate of the amount interest in putting the SS-40 higher in the band. The goal is to cover the Four State 7122 net and other freqs in that range. It will take different crystals, but that is not a problem.

If you are an SS-40 owner, or prospective owner, and would like to use your SS-40 in that freq range, please let me know. A reply on the list is ok. If enough interest is shown, the crystals will be made available on the SS-40 home page.

Thank you,
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

# 396. Re: SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-18 20:22:42 UTC
From: Johnny Matlock
Topic: 395  Message: 396

Terry:
I would like to move mu SS 40 up to 7122!
Thanks
Johnny AC0BQ

# 397. Re: [SS-40] SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-18 20:27:51 UTC
From: Virgil R. Hammond
Topic: 395  Message: 397

Terry:  I have a 7122 crystal but could use an extra. N0TGR  Dick

From: WA0ITP <wa0itp@...>
To: SS-40@yahoogroups.com
Sent: Saturday, February 18, 2012 2:14 PM
Subject: [SS-40] SS-40 on 7122

I'd like get a good estimate of the amount interest in putting the
SS-40 higher in the band. The goal is to cover the Four State 7122
net and other freqs in that range. It will take different crystals,
but that is not a problem.

If you are an SS-40 owner, or prospective owner, and would like to use
your SS-40 in that freq range, please let me know. A reply on the
list is ok. If enough interest is shown, the crystals will be made
available on the SS-40 home page.

Thank you,
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

# 398. Re: FW: [SS-40] kit for beginner? Also: needed instruments for construction

Yahoo group: SS-40
Date: 2012-02-18 20:30:00 UTC
From: Stephen Farthing
Topic: 393  Message: 398

Steve,

You don't need a PCB vice. Most PCBs come with holes for mounting them in a case. Just get 4 long machine screws with nuts, fit them into the mounting holes half way up and level...then you can easily put a component's leads in the holes, bend them, flip the board over, then solder the part.

When you are starting out it is easy to pay a lot of money for stuff you don't need and will hardly use.

Stuff you need :-

A good soldering iron with a range of tips - go for a temperature controlled one if you have the cash....Hakko are supposed to be good irons.

Some nice side cutters which you use to trim component leads after you have soldered them.

Some bigger cutters for cable. You shouldn't use the nice side cutters for this cos it will ruin them,

Some solder - I like lead based 60/40 rosin cored electronics solder....

Some small screwdrivers

A good work light and, if you are a bit lacking in the eye department, a bench magnifier and/or one of those head magnifiers which they sell at Harbor Freight (I bought one for me and one for my dad when i was last in the USA - he is 86 and it helps him see stuff he is machining in his workshop)

A multimeter or two, cheap digital ones are fine.

A solder sucker and/or desoldering braid and some flux - everyone solders stuff in the wrong place at times,,,,,so you need these dudes to help you remove faultily installed stuff...

If you get into this in time you will learn what else you need...

I really value my AADE L/C meter which comes as a kit Kanga US sell them

A frequency meter is a nice to have - if you have a comms RX or TCVR you can use it as a piece of test equipment. I use my FT817 a lot in this role...

If you really get the bug a scope is a great thing to have. A second user analogue Tektronix or HP scope with a bandwidth of 60 MHz or more is a really nice thing to have in the shack...My Tek scope just expired and i am lost without it :-(...

You can make, and should make, a lot of the test equipment you want. Things like power meters, SWR meters, dip meters and so on are makable. Even if you just buy kits you will learn a lot.

Hope this helps,

73s Steve G0XAR

--
Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful. E. F. Schumacher

# 399. Re: [SS-40] SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-18 20:30:44 UTC
From: Virgil R. Hammond
Topic: 395  Message: 399

Terry: Disregard my request as I was thinking of NS-40, N0TGR  Dick

From: WA0ITP <wa0itp@...>
To: SS-40@yahoogroups.com
Sent: Saturday, February 18, 2012 2:14 PM
Subject: [SS-40] SS-40 on 7122

I'd like get a good estimate of the amount interest in putting the
SS-40 higher in the band. The goal is to cover the Four State 7122
net and other freqs in that range. It will take different crystals,
but that is not a problem.

If you are an SS-40 owner, or prospective owner, and would like to use
your SS-40 in that freq range, please let me know. A reply on the
list is ok. If enough interest is shown, the crystals will be made
available on the SS-40 home page.

Thank you,
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

# 400. Re: SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-18 20:34:00 UTC
From: Stephen Farthing
Topic: 395  Message: 400

I'll be putting mine on 7,030 when I get around to building it....also I'll be using it for QRSS RX on 7,000,700

But if you are serious about moving it upwards I would love a 30 meter version ;-))))

73s Steve G0XAR

--
Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful. E. F. Schumacher

# 401. Re: [SS-40] SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-18 20:43:33 UTC
From: Bob Nichols
Topic: 395  Message: 401

Terry
\
I would like to be able to tune my
SS-40 in the 7110 to 7125 range.

72, 73 Nick, N1CK

# 402. Re: FW: [SS-40] kit for beginner? Also: needed instruments for construction

Yahoo group: SS-40
Date: 2012-02-18 20:49:40 UTC
From: Steve Eisenberg
Topic: 393  Message: 402

Steve:

Thanks for the indispensable information. I have an old Heathkit oscilloscope with an approximately 3" round CRT. I should see if I can find somebody to check it out. I should probably also find out what to do with it.
I know alignment procedures are required as part of the construction but I haven't looked into it very deeply.

I heard that thermostatically-controlled irons are a good idea. There are also, supposedly, ones which blow hot air. Not sure I need anything this fancy. Haakos go down to around $55- USD. That's not too bad.

73,

Steve
KA1ZFY

On Sat, Feb 18, 2012 at 3:30 PM, Stephen Farthing <squirrox@...>wrote:

> **
>
>
> Steve,
>
> You don't need a PCB vice.
>
>

# 403. Re: FW: [SS-40] kit for beginner? Also: needed instruments for construction

Yahoo group: SS-40
Date: 2012-02-18 20:59:05 UTC
From: Stephen Farthing
Topic: 393  Message: 403

Steve,

The hot air ones are for surface mount components.....you can use an ordinary iron for this....so my advice is just to get an ordinary iron....i think the Hakko would be an excellent choice. I wish we could get them here for a good price...

73s Steve G0XAR

--
Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful. E. F. Schumacher

# 404. Re: [SS-40] Re: SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-18 22:02:22 UTC
From: Jim Kortge
Topic: 395  Message: 404

On 2/18/2012 3:34 PM, Stephen Farthing wrote:
>
>
> I'll be putting mine on 7,030 when I get around to building it

It will go down that far with the supplied crystals.

....also
> I'll be using it for QRSS RX on 7,000,700

You will have to change the inductor in the VXO to get it down that far, but should make it. The JA guys have theirs down at the low end of 40 meters.

>
> But if you are serious about moving it upwards I would love a 30 meter
> version ;-))))

I wonder what the interest would be for that band? It would take a whole different set of VXO and IF Filter crystals to make it work on that band. I do have one of mine on 10-meters, so I know that can be done! :-)
>
> 73s Steve G0XAR

72,

Jim, K8IQY

# 405. Re: [SS-40] SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-18 22:55:07 UTC
From: Joe Feustle
Topic: 395  Message: 405

Please count me in.

73,
Joe, N8JF

Sent from my iPad

On Feb 18, 2012, at 3:14 PM, "WA0ITP" <wa0itp@...> wrote:

> I'd like get a good estimate of the amount interest in putting the
> SS-40 higher in the band. The goal is to cover the Four State 7122
> net and other freqs in that range. It will take different crystals,
> but that is not a problem.
>
> If you are an SS-40 owner, or prospective owner, and would like to use
> your SS-40 in that freq range, please let me know. A reply on the
> list is ok. If enough interest is shown, the crystals will be made
> available on the SS-40 home page.
>
> Thank you,
> ---
> Back to the bench, Winter's too valuable to waste.
> I love this radio stuff !
> 72, 73 Terry, WAØITP
> wa0itp@...
> www.wa0itp.com
> www.4sqrp.com
> www.qrpspots.com
>
>

# 406. Re: [SS-40] SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-18 23:21:14 UTC
From: Arthur Prior
Topic: 395  Message: 406

Count me in too. Art KJ4KBP

---
From: Joe Feustle <jafeustle@...>
To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
Sent: Saturday, February 18, 2012 4:55 PM
Subject: Re: [SS-40] SS-40 on 7122

Please count me in.

73,
Joe, N8JF

Sent from my iPad

On Feb 18, 2012, at 3:14 PM, "WA0ITP" <wa0itp@...> wrote:

>I'd like get a good estimate of the amount interest in putting the
>SS-40 higher in the band. The goal is to cover the Four State 7122
>net and other freqs in that range. It will take different crystals,
>but that is not a problem.
>
>If you are an SS-40 owner, or prospective owner, and would like to use
>your SS-40 in that freq range, please let me know. A reply on the
>list is ok. If enough interest is shown, the crystals will be made
>available on the SS-40 home page.
>
>Thank you,
>----------
>Back to the bench, Winter's too valuable to waste.
>I love this radio stuff !
>72, 73 Terry, WAØITP
>wa0itp@wa0itp.com
>www.wa0itp.com
>www.4sqrp.com
>www.qrpspots.com
>
>

# 407. Re: [SS-40] SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-18 23:51:44 UTC
From: All The Facts
Topic: 395  Message: 407

Count me in also on 7122 for ss-40. I even bought extra kit to do that.

John ns5z

Sent from my iPad

On Feb 18, 2012, at 5:21 PM, Arthur Prior <fulltimerart@...> wrote:

> Count me in too. Art KJ4KBP
>
> From: Joe Feustle <jafeustle@...>
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> Sent: Saturday, February 18, 2012 4:55 PM
> Subject: Re: [SS-40] SS-40 on 7122
>
>
> Please count me in.
>
> 73,
> Joe, N8JF
>
> Sent from my iPad
>
> On Feb 18, 2012, at 3:14 PM, "WA0ITP" <wa0itp@...> wrote:
>
>>
>> I'd like get a good estimate of the amount interest in putting the
>> SS-40 higher in the band. The goal is to cover the Four State 7122
>> net and other freqs in that range. It will take different crystals,
>> but that is not a problem.
>>
>> If you are an SS-40 owner, or prospective owner, and would like to use
>> your SS-40 in that freq range, please let me know. A reply on the
>> list is ok. If enough interest is shown, the crystals will be made
>> available on the SS-40 home page.
>>
>> Thank you,
>> ---------------------------------------------------------
>> Back to the bench, Winter's too valuable to waste.
>> I love this radio stuff !
>> 72, 73 Terry, WAØITP
>> wa0itp@...
>> www.wa0itp.com
>> www.4sqrp.com
>> www.qrpspots.com
>>

>
>
>

# 408. RE: [SS-40] SS-40 on 7122

Yahoo group: SS-40
Date: 2012-02-19 00:59:46 UTC
From: Stephen W. Szabo
Topic: 395  Message: 408

I’m in for one Terry.

Steve WB4OMM

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of All The Facts
Sent: Saturday, February 18, 2012 6:52 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] SS-40 on 7122

Count me in also on 7122 for ss-40. I even bought extra kit to do that.

John ns5z

Sent from my iPad

On Feb 18, 2012, at 5:21 PM, Arthur Prior <fulltimerart@...> wrote:

Count me in too. Art KJ4KBP

From: Joe Feustle <jafeustle@...>
To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
Sent: Saturday, February 18, 2012 4:55 PM
Subject: Re: [SS-40] SS-40 on 7122

Please count me in.

73,

Joe, N8JF

Sent from my iPad

On Feb 18, 2012, at 3:14 PM, "WA0ITP" <wa0itp@mchsi.com> wrote:

I'd like get a good estimate of the amount interest in putting the
SS-40 higher in the band. The goal is to cover the Four State 7122
net and other freqs in that range. It will take different crystals,
but that is not a problem.

If you are an SS-40 owner, or prospective owner, and would like to use
your SS-40 in that freq range, please let me know. A reply on the
list is ok. If enough interest is shown, the crystals will be made
available on the SS-40 home page.

Thank you,
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WAØITP

wa0itp@... <mailto:wa0itp%40wa0itp.com>
www.wa0itp.com <http://www.wa0itp.com/>
www.4sqrp.com <http://www.4sqrp.com/>
www.qrpspots.com <http://www.qrpspots.com/>

# 409. Re: My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-19 01:01:32 UTC
From: katsumi.seto
Topic: 375  Message: 409

Hi Hide

Unfortunately I could not read your Japanese e-mail. It was gabbled. It seems your PC or e-mail account does not accepte double byte charactors. One thing I could figure out was the IC chip you used for LED bar S-meter. Thanks. de ja7qil/Katsu

--- In SS-40@yahoogroups.com, "Hide" <qrper72@...> wrote:
>
> OKay Katsu,
>
> Well I know the "S-Miea" and I will also try to connect the
> small 500uA meter into where you mentioned, thanks!
>
> Did you receive my Japanese e-mail?
>
> ja9mat Hidehiko.
>
> > I am not sure which point is the best for picking up the AGC current. I hooked it up at the base of Q6. Where in the AGC circuit did you hook it up??
>

# 410. Re: FW: [SS-40] kit for beginner? Also: needed instruments for construction

Yahoo group: SS-40
Date: 2012-02-19 01:51:49 UTC
From: Steve Eisenberg
Topic: 393  Message: 410

Steve:

I guess they slap a big VAT on things over there. We will probably have it here soon.

Thanks for the info about the hot air irons. No way am I going to mess with SMT at this stage.

73,

Steve
KA1ZFY

On Sat, Feb 18, 2012 at 3:59 PM, Stephen Farthing <squirrox@...>wrote:

> **
>
>
> I wish we could get them here for a good price...
>
>
>

# 411. Re: My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-19 03:26:52 UTC
From: Hide
Topic: 375  Message: 411

Sorry Katsu,

OK, my e-mail grabbed somewhere...
Please check my blog as below;
http://qrper72.blogspot.com/2012/01/ss-40-receiver-mods-testing.html
and you can use,
http://akizukidenshi.com/catalog/g/gI-05183/
http://akizukidenshi.com/catalog/g/gI-05347/
Have a fun!

ja9mat hidehiko.

# 412. Re: My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-19 03:44:12 UTC
From: katsumi.seto
Topic: 375  Message: 412

Hi Hide

Thank you for the valuable informtion. I am planning to use these methods for my next project "Miss Mosquita". Thanks again.

de ja7qil/Katsu

--- In SS-40@yahoogroups.com, "Hide" <qrper72@...> wrote:
>
> Sorry Katsu,
>
> OK, my e-mail grabbed somewhere...
> Please check my blog as below;
> http://qrper72.blogspot.com/2012/01/ss-40-receiver-mods-testing.html
> and you can use,
> http://akizukidenshi.com/catalog/g/gI-05183/
> http://akizukidenshi.com/catalog/g/gI-05347/
> Have a fun!
>
> ja9mat hidehiko.
>

# 413. Re: My SS-40 finished !

Yahoo group: SS-40
Date: 2012-02-19 08:08:56 UTC
From: Hide
Topic: 375  Message: 413

OK!
The "Mosquita" is my interest rig!

ja9mat hidehiko.

--- In SS-40@yahoogroups.com, "katsumi.seto" <katsumi.seto@...> wrote:
>
> Hi Hide
>
> Thank you for the valuable informtion. I am planning to use these methods for my next project "Miss Mosquita". Thanks again.
>
> de ja7qil/Katsu
>
> --- In SS-40@yahoogroups.com, "Hide" <qrper72@> wrote:
> >
> > Sorry Katsu,
> >
> > OK, my e-mail grabbed somewhere...
> > Please check my blog as below;
> > http://qrper72.blogspot.com/2012/01/ss-40-receiver-mods-testing.html
> > and you can use,
> > http://akizukidenshi.com/catalog/g/gI-05183/
> > http://akizukidenshi.com/catalog/g/gI-05347/
> > Have a fun!
> >
> > ja9mat hidehiko.
> >
>

# 414. Fwd to SS-40 List: Dumb?? question re: Stand Alone VXO de WD9F

Yahoo group: SS-40
Date: 2012-02-24 20:54:01 UTC
From: Jim Kortge
Topic: 414  Message: 414

This should have gone to the SS-40 group list also. I'll do better next time.

72,

Jim, K8IQY

-------- Original Message --------
Subject: Re: [4SQRP] Dumb?? question re: Stand Alone VXO de WD9F
Date: Fri, 24 Feb 2012 15:50:04 -0500
From: Jim Kortge <jim.k8iqy@...>
To: 4sqrp@...

On 2/24/2012 3:31 PM, Woody Hester wrote:
> -------- 4 State QRP List :: The Friendly One --------
>
> ****** OzarkCon Registration Now Open *******
> ***** http://www.ozarkcon.com/index.php *****
>
>
>
>
>
>
> If my interest in the new stand alone VXO (just received in the mail..
> thanks Rich!!) is to drive my very cool, rock bound NS 40 as the
> companion transmitter to my also very cool SS-40 receiver and, if my
> SS-40 has a band spread of about 7.020 to 7.040, don't I want my stand
> alone VXO to center at 7.030 instead of 7.040?? Do I need three 7.030
> crystals instead of three 7.040 crystals & do I need to swap out some
> of the other components too? Thanks guys. When your just a hobbyist
> like me, with lots of clinical and business training (all worthless in
> the ham shack), everyone in the world of Ham Radio is your Elmer!
> Anxiously awaiting some more learning and thanks to all! / Woody / WD9F

Woody,

The SAVXO with the 7.040 MHz crystals should tune approximately the same range as the SS-40, only not quite as far down. With 7.040 MHz crystals, it will should tune from about 7.041 down to a bit below 7.030 MHz, maybe to 7.028 MHz. They won't exactly match, as the SS-40 uses 16.257 MHz crystals, which can be pulled farther than can the 7.040 MHz crystals, but, you should be able to hit the 7.040 MHz and 7.030 MHz QRp watering hole with the 7.040 MHz set. If you were to put in 7.030 MHz crystals, it won't come close to getting up to 7.040 MHz.

I hope that all makes some sense.

72,

Jim, K8IQY

# 415. Move to 7.122

Yahoo group: SS-40
Date: 2012-02-26 14:19:30 UTC
From: jafeustle
Topic: 415  Message: 415

Is there any information available yet on moving the receiver up to the .122 range.

72/73
Joe, N8JF

# 416. Re: [SS-40] Move to 7.122

Yahoo group: SS-40
Date: 2012-02-26 15:13:57 UTC
From: Barney
Topic: 415  Message: 416

Hi Joe;

There is a new group started that will help....

savxok8iqy@yahoogroups.com

I think this will help more..

http://www.wa0itp.com/savxo.html

73,

Barney

==========

On 2/26/2012 8:19 AM, jafeustle wrote:
> Is there any information available yet on moving the receiver up to the
> .122 range.
>
> 72/73
> Joe, N8JF
>
>

# 417. Re: [SS-40] Move to 7.122

Yahoo group: SS-40
Date: 2012-02-26 15:52:57 UTC
From: WA0ITP
Topic: 415  Message: 417

Yes, it takes special crystals, check the web page for more ingfo.
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "jafeustle" <jafeustle@...>
To: <SS-40@yahoogroups.com>
Sent: Sunday, February 26, 2012 8:19 AM
Subject: [SS-40] Move to 7.122

| Is there any information available yet on moving the receiver up to
the .122 range.
|
| 72/73
| Joe, N8JF
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 418. Re: [SS-40] Move to 7.122

Yahoo group: SS-40
Date: 2012-02-26 16:18:10 UTC
From: Jim Kortge
Topic: 415  Message: 418

On 2/26/2012 9:19 AM, jafeustle wrote:
> Is there any information available yet on moving the receiver up to the .122 range.
>
> 72/73
> Joe, N8JF
>

Joe,

The crystals needed to move the SS-40 up to the 7.122 MHz part of the band have been ordered, but won't be available for several weeks. They are in the queue for being manufactured. The crystals needed will be on 16.340 MHz and should allow operation above 7.122 and down below that frequency. The exact tuning range won't be know until we have some crystal sets in hand and installed in a SS-40 to see what tuning range results. I'll be doing that as soon as Terry has the crystals and sends me some. Stay tuned.....

72,

Jim, K8IQY

# 419. Binocular Core Winding Tutorial

Yahoo group: SS-40
Date: 2012-02-26 22:11:58 UTC
From: WA0ITP
Topic: 419  Message: 419

Jim has created a tutorial for winding the binoclular core of T1 in the SAVXO. It also applies for the binocular cores in the SS-40 and the Magic Box. However the number of windings for those 2 designs are different than in the SAVXO. The tutorial is a valuable reference, but dont use the same number of turns. Use the number specified in your SS-40 or NS-40 manual.

It will answer your questions about winding binocular cores. It's listed in the documentation section. http://www.wa0itp.com/savxo.html
---
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

# 420. Re: [SS-40] Binocular Core Winding Tutorial

Yahoo group: SS-40
Date: 2012-02-26 23:04:06 UTC
From: WA0ITP
Topic: 419  Message: 420

```
err ... Magic Box manual - not NS-40 manual sri
-------------------------------------------------------------------
Back to the bench, Winter's too valuable to waste.
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "WA0ITP" <wa0itp@...>
To: <SS-40@yahoogroups.com>; <K8IQY-MagicBox@yahoogroups.com>
Sent: Sunday, February 26, 2012 4:11 PM
Subject: [SS-40] Binocular Core Winding Tutorial

| Jim has created a tutorial for winding the binoclular core of T1 in
| the SAVXO. It also applies for the binocular cores in the SS-40 and
| the Magic Box. However the number of windings for those 2 designs
are
| different than in the SAVXO. The tutorial is a valuable reference,
| but dont use the same number of turns. Use the number specified in
| your SS-40 or NS-40 manual.
|
| It will answer your questions about winding binocular cores. It's
| listed in the documentation section.
http://www.wa0itp.com/savxo.html
| -------------------------------------------------------------------
| Back to the bench, Winter's too valuable to waste.
| I love this radio stuff !
| 72, 73 Terry, WA?ITP
| wa0itp@...
| www.wa0itp.com
| www.4sqrp.com
| www.qrpspots.com
|
|
|
|
|
| ------------------------------------
|
| Yahoo! Groups Links
|
|
```

|

# 421. Re: [savxok8iqy] Re: SAVXO Kit Build Update

Yahoo group: SS-40
Date: 2012-03-01 20:13:35 UTC
From: Jim Kortge
Topic: 421  Message: 421

On 3/1/2012 2:40 PM, Jerry AA6KI wrote:
> Hi Jim,

Hi Jerry,

>
> I'm probably missing something obvious, but what, pray tell, are UB1 and UB2?

You read my post and were paying attention! Thank you.....

UB1 and UB2 are "to-be-released" products coming from Four State QRP when we get the time and resources to do them. UB1 is Utility Board #1 PCB which has a myriad of circuits on it for doing project bread boarding. It includes circuitry for a regulated power supply, two switches, low harmonic output oscillator, ADE-1 mixer, a dual wide band amplifier, crystal filter, band pass filter, low pass filter/attenuator, and finally, a bread boarding area. UB2 is Utility Board #2 which has on it a medium power amplifier, higher power amplifier, low pass filter, and large bread boarding area. With the pair of boards, one can build receivers, converters, transmitters, try out ideas etc., etc. They are designed for experimenters who like to play with circuits and ideas and do it on a PCB, rather than Manhattan-style construction. The boards are all designed and ready to go into production when time and resources permit us to do so. Any feedback on the desirability of such boards might help push them along in the timing. Our best effort at a marketing survey if you will! :-)

Thanks for any clarification.

You are welcome Jerry. Pass the word!

72,

Jim, K8IQY

# 422. Re: [SS-40] Digest Number 95

Yahoo group: SS-40
Date: 2012-03-03 22:25:05 UTC
From: Richard F5VJD
Topic: 422  Message: 422

Hi Jim and everybody...

...now that sounds like an excellent idea! I'll buy at least one of
each - and I'll buy more if the price is right!

Thanks for all the nice toys you keep providing us with.

73

Richard F5VJD

On 02/03/2012 09:49, SS-40@yahoogroups.com wrote:
> SS-40 Receiver
> <http://groups.yahoo.com/group/SS-40;_ylc=X3oDMTJlcGlrM25hBF9TAzk3MzU5NzE1BGdycElkAzc0Nj
c4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDaGRyBHNsawNocGgEc3RpbWUDMTMzMDY3ODE4OQ-->
>
>
>
> Messages In This Digest (1 Message)
>
> 1.
> Re: [savxok8iqy] Re: SAVXO Kit Build Update <#1> From: Jim Kortge
>
> View All Topics
> <http://groups.yahoo.com/group/SS-40/messages;_ylc=X3oDMTJnMG92cmRnBF9TAzk3MzU5NzE1BGdyc
ElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZG1zZwRzbGsDYXRwYwRzdGltZQMxMzMwNjc4MTg5?xm
=1&m=p&tidx=1>
> | Create New Topic
> <http://groups.yahoo.com/group/SS-40/post;_ylc=X3oDMTJnZTJzZHVmBF9TAzk3MzU5NzE1BGdycElkA
zc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZG1zZwRzbGsDbnRwYwRzdGltZQMxMzMwNjc4MTg5>
>
>
>
> Message
>
> 1.
>
>
> Re: [savxok8iqy] Re: SAVXO Kit Build Update
> <http://groups.yahoo.com/group/SS-40/message/421;_ylc=X3oDMTJxbGc5OTV1BF9TAzk3MzU5NzE1BG
dycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjEEc2VjA2Rtc2cEc2xrA3Ztc2cEc3RpbWUD
MTMzMDY3ODE4OQ-->
>
>
>
> Posted by: "Jim Kortge" jim.k8iqy@...

> <mailto:jim.k8iqy@...?Subject=%20Re%3A%20%5Bsavxok8iqy%5D%20Re%3A%20SAVXO%20Kit%20Build%20Update>
> k8iqy <http://profiles.yahoo.com/k8iqy>
>
>
> Thu Mar 1, 2012 12:13 pm (PST)
>
>
>
> On 3/1/2012 2:40 PM, Jerry AA6KI wrote:
> > Hi Jim,
>
> Hi Jerry,
>
> >
> > I'm probably missing something obvious, but what, pray tell, are
> UB1 and UB2?
>
> You read my post and were paying attention! Thank you.....
>
> UB1 and UB2 are "to-be-released" products coming from Four State QRP
> when we get the time and resources to do them. UB1 is Utility Board
> #1 PCB which has a myriad of circuits on it for doing project bread
> boarding. It includes circuitry for a regulated power supply, two
> switches, low harmonic output oscillator, ADE-1 mixer, a dual wide
> band amplifier, crystal filter, band pass filter, low pass
> filter/attenuator, and finally, a bread boarding area. UB2 is Utility
> Board #2 which has on it a medium power amplifier, higher power
> amplifier, low pass filter, and large bread boarding area. With the
> pair of boards, one can build receivers, converters, transmitters,
> try
> out ideas etc., etc. They are designed for experimenters who like to
> play with circuits and ideas and do it on a PCB, rather than
> Manhattan-style construction. The boards are all designed and
> ready to
> go into production when time and resources permit us to do so. Any
> feedback on the desirability of such boards might help push them
> along
> in the timing. Our best effort at a marketing survey if you will! :-)
>
> Thanks for any clarification.
>
> You are welcome Jerry. Pass the word!
>
> 72,
>
> Jim, K8IQY
>
> Back to top <#toc>
> Reply to sender

> <mailto:jim.k8iqy@...?Subject=Re%3A%20%5Bsavxok8iqy%5D%20Re%3A%20SAVXO%20Kit%20Build%20Update>
> | Reply to group
> <mailto:SS-40@yahoogroups.com?Subject=%20Re%3A%20%5Bsavxok8iqy%5D%20Re%3A%20SAVXO%20Kit%20Build%20Update>
> | Reply via web post
> <http://groups.yahoo.com/group/SS-40/post;_ylc=X3oDMTJxcmY5MWQ1BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjEEc2VjA2Rtc2cEc2xrA3JwbHkEc3RpbWUDMTMzMDY3ODE4OQ--?act=reply&messageNum=421>
>
> Messages in this topic
> <http://groups.yahoo.com/group/SS-40/message/421;_ylc=X3oDMTM0Ym52NXVxBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjEEc2VjA2Rtc2cEc2xrA3Z0cGMEc3RpbWUDMTMzMDY3ODE4OQR0cGNJZAM0MjE->
> (1)
>
> Recent Activity
>
> *
> 2
> New Members
> <http://groups.yahoo.com/group/SS-40/members;_ylc=X3oDMTJncGxqdTE3BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bWJycwRzdGltZQMxMzMwNjc4MTg5?o=6
>
>
> Visit Your Group
> <http://groups.yahoo.com/group/SS-40;_ylc=X3oDMTJmZjFpY2IyBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW1lAzEzMzA2NzgxODk->
>
> Y! Groups blog
>
> the best source
> <http://global.ard.yahoo.com/SIG=15l1rdc06/M=493064.14543954.14365463.8674578/D=groups/S=1705063108:NC/Y=YAHOO/EXP=1330685389/L=ab7bb4a2-6444-11e1-9d7d-0f55e2c8b4b6/B=ntmsCEoGYmk-/J=1330678189559067/K=BhO8XbBzvs59mIo58mQxgg/A=5191955/R=0/SIG=112mhte3e/*http://www.ygroupsblog.com/blog/>
>
> for the latest
>
> scoop on Groups.
>
> Sitebuilder
>
> Build a web site
> <http://global.ard.yahoo.com/SIG=15leb7r4s/M=493064.14543952.14365456.8674578/D=groups/S=1705063108:NC/Y=YAHOO/EXP=1330685389/L=ab7bb4a2-6444-11e1-9d7d-0f55e2c8b4b6/B=nNmsCEoGYmk-/J=1330678189559067/K=BhO8XbBzvs59mIo58mQxgg/A=4025304/R=0/SIG=12uhb64pb/*http://us.rd.yahoo.com/evt=44092/*http://smallbusiness.yahoo.com/webhosting/sitebuilding.php>
>
> quickly & easily

>
> with Sitebuilder.
>
> Yahoo! Groups
>
> Do More For Dogs Group
> <http://global.ard.yahoo.com/SIG=15lf8ttaa/M=493064.14543957.14365470.8674578/D=groups/S=1705063108:NC/Y=YAHOO/EXP=1330685389/L=ab7bb4a2-6444-11e1-9d7d-0f55e2c8b4b6/B=ndmsCEoGYmk-/J=1330678189559067/K=BhO8XbBzvs59mIo58mQxgg/A=5522129/R=0/SIG=11k97shp3/*http://advision.webevents.yahoo.com/domorefordogs/>
>
> Join a group of dog owners
>
> who do more.
>
> Need to Reply?
>
> Click one of the "Reply" links to respond to a specific message in the
> Daily Digest.
>
> Create New Topic
> <http://groups.yahoo.com/group/SS-40/post;_ylc=X3oDMTJmZWJwMDVxBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjBHN0aW1lAzEzMzA2NzgxODk->
> | Visit Your Group on the Web
> <http://groups.yahoo.com/group/SS-40;_ylc=X3oDMTJkYjU3N2ZuBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNocARzdGltZQMxMzMwNjc4MTg5>
>
> Messages
> <http://groups.yahoo.com/group/SS-40/messages;_ylc=X3oDMTJmbXJva2g3BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNtc2dzBHN0aW1lAzEzMzA2NzgxODk->
> | Files
> <http://groups.yahoo.com/group/SS-40/files;_ylc=X3oDMTJnMHJudDljBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNmaWxlcwRzdGltZQMxMzMwNjc4MTg5>
> | Photos
> <http://groups.yahoo.com/group/SS-40/photos;_ylc=X3oDMTJmcXUzbDFnBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNwaG90BHN0aW1lAzEzMzA2NzgxODk->
>
> Yahoo! Groups
> <http://groups.yahoo.com/;_ylc=X3oDMTJla2JlNmRnBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTMzMDY3ODE4OQ-->
>
> Change settings via the Web
> <http://groups.yahoo.com/group/SS-40/join;_ylc=X3oDMTJnM2NzdDdzBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNzdG5ncwRzdGltZQMxMzMwNjc4MTg5>
> (Yahoo! ID required)
> Change settings via email: Switch delivery to Individual
> <mailto:SS-40-normal@yahoogroups.com?subject=Email%20Delivery:%20Indiviual%20Email>
> | Switch format to Traditional
> <mailto:SS-40-traditional@yahoogroups.com?subject=Change%20Delivery%20Format:%20Traditional>

>
> Visit Your Group
> <http://groups.yahoo.com/group/SS-40;_ylc=X3oDMTJlMWhiNWhsBF9TAzk3MzU5NzE1BGdycElkAzc0Nj
c4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNocGYEc3RpbWUDMTMzMDY3ODE4OQ-->
> | Yahoo! Groups Terms of Use <http://docs.yahoo.com/info/terms/> |
> Unsubscribe
> <mailto:SS-40-unsubscribe@yahoogroups.com?subject=Unsubscribe>

# 423. Fwd: Re: [SS-40] Digest Number 95

Yahoo group: SS-40
Date: 2012-03-03 22:40:22 UTC
From: Richard F5VJD
Topic: 422  Message: 423

Hi Jim and everybody...

...now that sounds like an excellent idea! I'll buy at least one of
each - and I'll buy more if the price is right!

Thanks for all the nice toys you keep providing us with.

73

Richard F5VJD

On 02/03/2012 09:49, SS-40@yahoogroups.com wrote:
> SS-40 Receiver
> <http://groups.yahoo.com/group/SS-40;_ylc=X3oDMTJlcGlrM25hBF9TAzk3MzU5NzE1BGdycElkAzc0Nj
c4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDaGRyBHNsawNocGgEc3RpbWUDMTMzMDY3ODE4OQ-->
>
>
>
> Messages In This Digest (1 Message)
>
> 1.
> Re: [savxok8iqy] Re: SAVXO Kit Build Update <#1> From: Jim Kortge
>
> View All Topics
> <http://groups.yahoo.com/group/SS-40/messages;_ylc=X3oDMTJnMG92cmRnBF9TAzk3MzU5NzE1BGdyc
ElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZG1zZwRzbGsDYXRwYwRzdGltZQMxMzMwNjc4MTg5?xm
=1&m=p&tidx=1>
> | Create New Topic
> <http://groups.yahoo.com/group/SS-40/post;_ylc=X3oDMTJnZTJzZHVmBF9TAzk3MzU5NzE1BGdycElkA
zc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZG1zZwRzbGsDbnRwYwRzdGltZQMxMzMwNjc4MTg5>
>
>
>
> Message
>
> 1.
>
>
> Re: [savxok8iqy] Re: SAVXO Kit Build Update
> <http://groups.yahoo.com/group/SS-40/message/421;_ylc=X3oDMTJxbGc5OTV1BF9TAzk3MzU5NzE1BG
dycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjEEc2VjA2Rtc2cEc2xrA3Ztc2cEc3RpbWUD
MTMzMDY3ODE4OQ-->
>
>
>
> Posted by: "Jim Kortge" jim.k8iqy@...

> <mailto:jim.k8iqy@...?Subject=%20Re%3A%20%5Bsavxok8iqy%5D%20Re%3A%20SAVXO%20Kit%20Build%20Update>
> k8iqy <http://profiles.yahoo.com/k8iqy>
>
>
> Thu Mar 1, 2012 12:13 pm (PST)
>
>
>
> On 3/1/2012 2:40 PM, Jerry AA6KI wrote:
> > Hi Jim,
>
> Hi Jerry,
>
> >
> > I'm probably missing something obvious, but what, pray tell, are
> UB1 and UB2?
>
> You read my post and were paying attention! Thank you.....
>
> UB1 and UB2 are "to-be-released" products coming from Four State QRP
> when we get the time and resources to do them. UB1 is Utility Board
> #1 PCB which has a myriad of circuits on it for doing project bread
> boarding. It includes circuitry for a regulated power supply, two
> switches, low harmonic output oscillator, ADE-1 mixer, a dual wide
> band amplifier, crystal filter, band pass filter, low pass
> filter/attenuator, and finally, a bread boarding area. UB2 is Utility
> Board #2 which has on it a medium power amplifier, higher power
> amplifier, low pass filter, and large bread boarding area. With the
> pair of boards, one can build receivers, converters, transmitters,
> try
> out ideas etc., etc. They are designed for experimenters who like to
> play with circuits and ideas and do it on a PCB, rather than
> Manhattan-style construction. The boards are all designed and
> ready to
> go into production when time and resources permit us to do so. Any
> feedback on the desirability of such boards might help push them
> along
> in the timing. Our best effort at a marketing survey if you will! :-)
>
> Thanks for any clarification.
>
> You are welcome Jerry. Pass the word!
>
> 72,
>
> Jim, K8IQY
>
> Back to top <#toc>
> Reply to sender

> <mailto:jim.k8iqy@...?Subject=Re%3A%20%5Bsavxok8iqy%5D%20Re%3A%20SAVXO%20Kit%20Build%20Update>
> | Reply to group
> <mailto:SS-40@yahoogroups.com?Subject=%20Re%3A%20%5Bsavxok8iqy%5D%20Re%3A%20SAVXO%20Kit%20Build%20Update>
> | Reply via web post
> <http://groups.yahoo.com/group/SS-40/post;_ylc=X3oDMTJxcmY5MWQ1BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjEEc2VjA2Rtc2cEc2xrA3JwbHkEc3RpbWUDMTMzMDY3ODE4OQ--?act=reply&messageNum=421>
>
> Messages in this topic
> <http://groups.yahoo.com/group/SS-40/message/421;_ylc=X3oDMTM0Ym52NXVxBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjEEc2VjA2Rtc2cEc2xrA3Z0cGMEc3RpbWUDMTMzMDY3ODE4OQR0cGNJZAM0MjE->
> (1)
>
> Recent Activity
>
> *
> 2
> New Members
> <http://groups.yahoo.com/group/SS-40/members;_ylc=X3oDMTJncGxqdTE3BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bWJycwRzdGltZQMxMzMwNjc4MTg5?o=6
>
>
> Visit Your Group
> <http://groups.yahoo.com/group/SS-40;_ylc=X3oDMTJmZjFpY2IyBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW1lAzEzMzA2NzgxODk->
>
> Y! Groups blog
>
> the best source
> <http://global.ard.yahoo.com/SIG=15l1rdc06/M=493064.14543954.14365463.8674578/D=groups/S=1705063108:NC/Y=YAHOO/EXP=1330685389/L=ab7bb4a2-6444-11e1-9d7d-0f55e2c8b4b6/B=ntmsCEoGYmk-/J=1330678189559067/K=BhO8XbBzvs59mIo58mQxgg/A=5191955/R=0/SIG=112mhte3e/*http://www.ygroupsblog.com/blog/>
>
> for the latest
>
> scoop on Groups.
>
> Sitebuilder
>
> Build a web site
> <http://global.ard.yahoo.com/SIG=15leb7r4s/M=493064.14543952.14365456.8674578/D=groups/S=1705063108:NC/Y=YAHOO/EXP=1330685389/L=ab7bb4a2-6444-11e1-9d7d-0f55e2c8b4b6/B=nNmsCEoGYmk-/J=1330678189559067/K=BhO8XbBzvs59mIo58mQxgg/A=4025304/R=0/SIG=12uhb64pb/*http://us.rd.yahoo.com/evt=44092/*http://smallbusiness.yahoo.com/webhosting/sitebuilding.php>
>
> quickly & easily

>
> with Sitebuilder.
>
> Yahoo! Groups
>
> Do More For Dogs Group
> <http://global.ard.yahoo.com/SIG=15lf8ttaa/M=493064.14543957.14365470.8674578/D=groups/S=1705063108:NC/Y=YAHOO/EXP=1330685389/L=ab7bb4a2-6444-11e1-9d7d-0f55e2c8b4b6/B=ndmsCEoGYmk-/J=1330678189559067/K=BhO8XbBzvs59mIo58mQxgg/A=5522129/R=0/SIG=11k97shp3/*http://advision.webevents.yahoo.com/domorefordogs/>
>
> Join a group of dog owners
>
> who do more.
>
> Need to Reply?
>
> Click one of the "Reply" links to respond to a specific message in the
> Daily Digest.
>
> Create New Topic
> <http://groups.yahoo.com/group/SS-40/post;_ylc=X3oDMTJmZWJwMDVxBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjBHN0aW1lAzEzMzA2NzgxODk->
> | Visit Your Group on the Web
> <http://groups.yahoo.com/group/SS-40;_ylc=X3oDMTJkYjU3N2ZuBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNocARzdGltZQMxMzMwNjc4MTg5>
>
> Messages
> <http://groups.yahoo.com/group/SS-40/messages;_ylc=X3oDMTJmbXJva2g3BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNtc2dzBHN0aW1lAzEzMzA2NzgxODk->
> | Files
> <http://groups.yahoo.com/group/SS-40/files;_ylc=X3oDMTJnMHJudDljBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNmaWxlcwRzdGltZQMxMzMwNjc4MTg5>
> | Photos
> <http://groups.yahoo.com/group/SS-40/photos;_ylc=X3oDMTJmcXUzbDFnBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNwaG90BHN0aW1lAzEzMzA2NzgxODk->
>
> Yahoo! Groups
> <http://groups.yahoo.com/;_ylc=X3oDMTJla2JlNmRnBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTMzMDY3ODE4OQ-->
>
> Change settings via the Web
> <http://groups.yahoo.com/group/SS-40/join;_ylc=X3oDMTJnM2NzdDdzBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNzdG5ncwRzdGltZQMxMzMwNjc4MTg5>
> (Yahoo! ID required)
> Change settings via email: Switch delivery to Individual
> <mailto:SS-40-normal@yahoogroups.com?subject=Email%20Delivery:%20Indiviual%20Email>
> | Switch format to Traditional
> <mailto:SS-40-traditional@yahoogroups.com?subject=Change%20Delivery%20Format:%20Traditional>

>
> Visit Your Group
> <http://groups.yahoo.com/group/SS-40;_ylc=X3oDMTJlMWhiNWhsBF9TAzk3MzU5NzE1BGdycElkAzc0Nj
c4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNocGYEc3RpbWUDMTMzMDY3ODE4OQ-->
> | Yahoo! Groups Terms of Use <http://docs.yahoo.com/info/terms/> |
> Unsubscribe
> <mailto:SS-40-unsubscribe@yahoogroups.com?subject=Unsubscribe>

# 424. Re: [4SQRP] SS-40 Photo Page

Yahoo group: SS-40
Date: 2012-03-10 23:19:18 UTC
From: Jim Kortge
Topic: 424  Message: 424

On 3/10/2012 12:07 PM, Steve Eisenberg wrote:
> -------- 4 State QRP List :: The Friendly One --------
>
> ****** OzarkCon Registration Now Open *******
> ***** http://www.ozarkcon.com/index.php *****
>
>
>
>
>
>
> NICE! Board's a little intimidating for a beginner,

Really, in what way?

but I'll get there.

Good. I thought the PCB was very open and easy to work on compared to
other kits that I've seen and done, like the 2N2/XX. That PCB is
really packed!
>
> Steve
> KA1ZFY

72 and thanks for the feedback,

Jim, K8IQY

# 425. Re: SS 40

Yahoo group: SS-40
Date: 2012-03-13 23:23:09 UTC
From: pileupjunkie
Topic: 425  Message: 425

Is this kit run finished ?
I ran into this list from a web page in VK land and I think it said there are no more kits but another run is expected
BOB
AF2Q

# 426. Re: [SS-40] Re: SS 40

Yahoo group: SS-40
Date: 2012-03-13 23:54:53 UTC
From: beargyrils@aol.com
Topic: 425  Message: 426

Sorry but I forgot the URL where the club was selling kits.
I saw that small 1 watt TX that would be nice to go with the receiver.
Appreciate the link
BOB
AF2Q

# 427. Re: [SS-40] Re: SS 40

Yahoo group: SS-40
Date: 2012-03-14 00:16:33 UTC
From: Jim Kortge
Topic: 425  Message: 427

On 3/13/2012 7:23 PM, pileupjunkie wrote:
> Is this kit run finished ?

No, not at all.

> I ran into this list from a web page in VK land and I think it said there are no more kits but another run is expected

A new batch of kit is being created as I type this. Don't know how
long the process will take from end to end, but we are working on it.
Stay tuned.....

72,

Jim, K8IQY

# 428. Re: [SS-40] Re: SS 40

Yahoo group: SS-40
Date: 2012-03-14 00:21:14 UTC
From: beargyrils@aol.com
Topic: 425  Message: 428

Thanks Jim,
I hit this list by luck and I lost the URL for the site that listed other kits.
They have a small 1 that would be nice to go with this RX and also be able to work a split.
Post the URL if you know it.
Thanks for responding.
BOB
AF2Q

In a message dated 3/13/2012 8:16:43 P.M. Eastern Daylight Time, jim.k8iqy@... writes:

A new batch of kit is being created as I type this. Don't know how long the process will take from end to end, but we are working on it. Stay tuned.....

72,

Jim, K8IQY

# 429. Re: [SS-40] Re: SS 40

Yahoo group: SS-40
Date: 2012-03-14 00:50:16 UTC
From: Barney
Topic: 425  Message: 429

Maybe this is it??

http://www.4sqrp.com/index.php

Barney/NO0N

==========

On 3/13/2012 7:21 PM, beargyrils@... wrote:
> *Thanks Jim,*
> *I hit this list by luck and I lost the URL for the site that listed
> other kits.*
> *They have a small 1 that would be nice to go with this RX and also be
> able to work a split.*
> *Post the URL if you know it.*
> *Thanks for responding.*
> *BOB*
> *AF2Q*
> In a message dated 3/13/2012 8:16:43 P.M. Eastern Daylight Time,
> jim.k8iqy@... writes:
>
> A new batch of kit is being created as I type this. Don't know how
> long the process will take from end to end, but we are working on it.
> Stay tuned.....
>
> 72,
>
> Jim, K8IQY
>
> **
>
>

# 430. Re: [SS-40] Re: SS 40

Yahoo group: SS-40
Date: 2012-03-14 00:53:43 UTC
From: WA0ITP
Topic: 425  Message: 430

The next run is being kitted next week, and will be ready before
OzarkCon. It is definitely NOT being discontinued.
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "pileupjunkie" <beargyrils@...>
To: <SS-40@yahoogroups.com>
Sent: Tuesday, March 13, 2012 6:23 PM
Subject: [SS-40] Re: SS 40

| Is this kit run finished ?
| I ran into this list from a web page in VK land and I think it said
there are no more kits but another run is expected
| BOB
| AF2Q
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 431. Re: [SS-40] Re: SS 40

Yahoo group: SS-40
Date: 2012-03-14 01:00:41 UTC
From: beargyrils@aol.com
Topic: 425  Message: 431

Hi Barry,
Yes that is the site and what I want is the
SS-40
40M High Performance
Superhet Receiver
And that small 1 Watt TX shown on the site.
From what I hear the RX will soon be kitted soon.
Thanks for the URL and I did book mark it this time.
BOB
AF2Q

In a message dated 3/13/2012 8:50:20 P.M. Eastern Daylight Time,
barneyro@... writes:
Maybe this is it??

http://www.4sqrp.com/index.php

Barney/NO0N

# 432. Re: [SS-40] Re: SS 40

Yahoo group: SS-40
Date: 2012-03-14 01:02:17 UTC
From: beargyrils@aol.com
Topic: 425  Message: 432

OK Terry,
Sounds good and keep my name on the list.
Thanks for responding.
BOB
AF2Q

In a message dated 3/13/2012 8:53:48 P.M. Eastern Daylight Time,
wa0itp@... writes:

The next run is being kitted next week, and will be ready before
OzarkCon. It is definitely NOT being discontinued.
---

# 433. LED bargraph based audio derived S-meter

Yahoo group: SS-40
Date: 2012-03-15 03:48:28 UTC
From: Chris Waldrup
Topic: 433  Message: 433

Hi,

Can someone point me towards a schematic for a bargraph based s meter? I have built the S-meter circuit (with a MPF102 and an NPN transistor) from Southgate Amateur Radio Club's website twice in the last week and can't get it to function.

Thank you.

Chris
KD4PBJ

# 434. Re: LED bargraph based audio derived S-meter

Yahoo group: SS-40
Date: 2012-03-15 16:08:38 UTC
From: katsumi.seto
Topic: 433  Message: 434

Hi Chris

How about this?

http://qrper72.blogspot.com/2012/01/ss-40-receiver-mods-testing.html

de ja7qil/katsu

--- In SS-40@yahoogroups.com, Chris Waldrup <kd4pbj@...> wrote:
>
>
> Hi,
>
> Can someone point me towards a schematic for a bargraph based s meter?
> I have built the S-meter circuit (with a MPF102 and an NPN transistor)
> from Southgate Amateur Radio Club's website twice in the last week and
> can't get it to function.
>
> Thank you.
>
> Chris
> KD4PBJ
>

# 435. Re: [SS-40] Re: LED bargraph based audio derived S-meter

Yahoo group: SS-40
Date: 2012-03-15 18:02:11 UTC
From: Chris Waldrup
Topic: 433  Message: 435

Hi Katsu,

Thank you! I have one of the bargraph chips so will make a high impendance buffer amp and feed the LM3915 with it.

Chris

On Thu, Mar 15, 2012 at 11:08 AM, katsumi.seto <katsumi.seto@...>wrote:

> **
>
>
> Hi Chris
>
> How about this?
>
> http://qrper72.blogspot.com/2012/01/ss-40-receiver-mods-testing.html
>
> de ja7qil/katsu
>
>
> --- In SS-40@yahoogroups.com, Chris Waldrup <kd4pbj@...> wrote:
> >
> >
> > Hi,
> >
> > Can someone point me towards a schematic for a bargraph based s meter?
> > I have built the S-meter circuit (with a MPF102 and an NPN transistor)
> > from Southgate Amateur Radio Club's website twice in the last week and
> > can't get it to function.
> >
> > Thank you.
> >
> > Chris
> > KD4PBJ
> >
>
>
>

# 436. ANY REASON WHY AE5K BANNED ME FROM THE REFLECTOR?

Yahoo group: SS-40
Date: 2012-03-21 13:55:22 UTC
From: pileupjunkie
Topic: 436  Message: 436

The email address you supplied is banned from this mailing list. If you think this restriction is erroneous, please contact the list owners at 4sqrp-owner@....

BOB
AF2Q

# 437. Tuning rate....

Yahoo group: SS-40
Date: 2012-03-25 12:53:11 UTC
From: Stephen
Topic: 437  Message: 437

Hi Guys,

I am just about to start construction. I am wondering if there is any milage in using a multi turn pot for tuning. Any comments?

73s Steve G0XAR

# 438. Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-25 18:20:58 UTC
From: Paul
Topic: 437  Message: 438

You are only tuning 10 KHz of the band.

de Paul, W8AEF

ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP

-----Original Message-----
From: Stephen
Sent: Sunday, March 25, 2012 5:53 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] Tuning rate....

Hi Guys,

I am just about to start construction. I am wondering if there is any milage
in using a multi turn pot for tuning. Any comments?

73s Steve G0XAR

# 439. RE: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-25 19:12:49 UTC
From: Paul Feltz
Topic: 437  Message: 439

I have not starte mine yet, but I plan to do just that along with a turns counting dial that will allow me to have a cross reference chart of turns count Vs frequency. Perhaps a overkill but that is the plan.

Paul
WA0VDN

To: SS-40@yahoogroups.com
From: paul@...
Date: Sun, 25 Mar 2012 11:20:58 -0700
Subject: Re: [SS-40] Tuning rate....

You are only tuning 10 KHz of the band.

de Paul, W8AEF

ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP

-----Original Message-----
From: Stephen
Sent: Sunday, March 25, 2012 5:53 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] Tuning rate....

Hi Guys,

I am just about to start construction. I am wondering if there is any milage
in using a multi turn pot for tuning. Any comments?

73s Steve G0XAR

# 440. Tuning Range vs Freq Display

Yahoo group: SS-40
Date: 2012-03-25 21:35:29 UTC
From: WA0ITP
Topic: 440  Message: 440

Anyone thinking of using a multi turn pot and/or a digital display may want to consider a tuning dial and a cal chart. It's cheap, free, and easy, all good qrp attributes :o) I've used that combo on several rigs and it works quite well on single turn pots and variable caps, if the tuning rang isnt too great. Examples: My Ft Tuthill has a 50 kc range and the knob is pretty touchy. The MAS 80 has about a 30kc range and it's ok. The 2N2xx/20 has a 10 turn pot supplied in the kit and it's great, but requires a digital display imo.

My SS-40 has about a 25 kc range which is a nice comfortable tuning rate, as Jim intended. The dial and cal chart will work FB on it, or a dial can be made with frequencies printed on it, eliminating the cal chart.

I hope this helps with choosing a method of knowing the tuned frequency. Having said all that, I have to admit that I really like the looks and functionality of a digital display.

Check out WB8RCR's vy useful and user friendly Dial Maker program. A link is on the kit's home page. http://www.wa0itp.com/ss40.html
---
I love this radio stuff !
72, 73 Terry, WAØITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Paul Feltz
To: ss-40@yahoogroups.com
Sent: Sunday, March 25, 2012 2:12 PM
Subject: RE: [SS-40] Tuning rate....

I have not starte mine yet, but I plan to do just that along with a turns counting dial that will allow me to have a cross reference chart of turns count Vs frequency. Perhaps a overkill but that is the plan.

Paul
WA0VDN

---
To: SS-40@yahoogroups.com
From: paul@...
Date: Sun, 25 Mar 2012 11:20:58 -0700
Subject: Re: [SS-40] Tuning rate....

You are only tuning 10 KHz of the band.

de Paul, W8AEF

ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP

-----Original Message-----
From: Stephen
Sent: Sunday, March 25, 2012 5:53 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] Tuning rate....

Hi Guys,

I am just about to start construction. I am wondering if there is any milage in using a multi turn pot for tuning. Any comments?

73s Steve G0XAR

# 441. Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-26 01:34:20 UTC
From: Jim Kortge
Topic: 437  Message: 441

On 3/25/2012 2:20 PM, Paul wrote:
> You are only tuning 10 KHz of the band.
>
> de Paul, W8AEF
>
> ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP

Well actually, more like 25 to 30 KHz of the band, but a single turn pot works well for this range. Above about 30 KHz, more turns are very helpful.

Just my $0.02!

Jim, K8IQY

# 442. Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-26 03:43:57 UTC
From: blackbelair
Topic: 437  Message: 442

I thought a vernier dial would be nice but I think they're for variable caps. only.
Fred, k6kub

---
From: Jim Kortge <jim.k8iqy@...>
To: SS-40@yahoogroups.com
Cc: Paul <paul@...>
Sent: Sunday, March 25, 2012 6:34 PM
Subject: Re: [SS-40] Tuning rate....

On 3/25/2012 2:20 PM, Paul wrote:
> You are only tuning 10 KHz of the band.
>
> de Paul, W8AEF
>
> ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP

Well actually, more like 25 to 30 KHz of the band, but a single turn pot works well for this range. Above about 30 KHz, more turns are very helpful.

Just my $0.02!

Jim, K8IQY

# 443. Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-26 08:03:59 UTC
From: Katsumi Seto
Topic: 437  Message: 443

You can use a vernier dial with any ordinary variable resistor. If you have n
ot puchased the one yet, you should choose a 270 degree vernier dial for maxim
um adjustable range. de ja7qil/katsu

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> Cc: Paul <paul@...>
> From: blackbelair <blackbelair@...>
> Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> Subject: Re: [SS-40] Tuning rate....
>
>
> I thought a vernier dial would be nice but I think they're for variable caps
. only.
> Fred, k6kub
>
>
>
> _____
> From: Jim Kortge <jim.k8iqy@...>
> To: SS-40@yahoogroups.com
> Cc: Paul <paul@...>
> Sent: Sunday, March 25, 2012 6:34 PM
> Subject: Re: [SS-40] Tuning rate....
>
>
> ?
> On 3/25/2012 2:20 PM, Paul wrote:
> > You are only tuning 10 KHz of the band.
> >
> > de Paul, W8AEF
> >
> > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
>
> Well actually, more like 25 to 30 KHz of the band, but a single turn
> pot works well for this range. Above about 30 KHz, more turns are
> very helpful.
>
> Just my $0.02!
>
> Jim, K8IQY
>
>
>

# 444. Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-26 17:19:33 UTC
From: blackbelair
Topic: 437  Message: 444

Actually, it doesn't seem to be an easy adaptation to use a vernier dial since the pots are mounted on the pcb and the shaft protrudes through the case, whereas the vernier dial coupling mechanism needs to protrude into the case so that the stationary part of the dial is flush with the case.
Fred, k6kub

_____
From: Katsumi Seto <katsumi.seto@nifty.com>
To: SS-40@yahoogroups.com
Sent: Monday, March 26, 2012 1:03 AM
Subject: Re: Re: [SS-40] Tuning rate....

You can use a vernier dial with any ordinary variable resistor. If you have n
ot puchased the one yet, you should choose a 270 degree vernier dial for maxim
um adjustable range. de ja7qil/katsu

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> Cc: Paul <paul@...>
> From: blackbelair <blackbelair@...>
> Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> Subject: Re: [SS-40] Tuning rate....
>
>
> I thought a vernier dial would be nice but I think they're for variable caps
. only.
> Fred, k6kub
>
>
>
> _____
> From: Jim Kortge <jim.k8iqy@gmail.com>
> To: SS-40@yahoogroups.com
> Cc: Paul <paul@...>
> Sent: Sunday, March 25, 2012 6:34 PM
> Subject: Re: [SS-40] Tuning rate....
>
>
> ?
> On 3/25/2012 2:20 PM, Paul wrote:
> > You are only tuning 10 KHz of the band.
> >
> > de Paul, W8AEF
> >
> > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
>

> Well actually, more like 25 to 30 KHz of the band, but a single turn
> pot works well for this range. Above about 30 KHz, more turns are
> very helpful.
>
> Just my $0.02!
>
> Jim, K8IQY
>
>
>

# 445. Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-27 13:29:31 UTC
From: Katsumi Seto
Topic: 437  Message: 445

It is not as difficult as you may think. See how JM2DZL mounted his vernier d
ial below:

http://jm2dzl.up.seesaa.net/image/174923114.jpg
http://jm2dzl.up.seesaa.net/image/174922802.jpg
He used a 300 degee vernier dial for SW40+.

Mine is a much simpler method as below:
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0402.jpg
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0401.jpg
The spacer rods were used to connect the reduction shaft and the pod.

de ja7qil/katsu

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> From: blackbelair <blackbelair@...>
> Date: Mon, 26 Mar 2012 10:19:33 -0700 (PDT)
> Subject: Re: Re: [SS-40] Tuning rate....
>
>
> Actually, it doesn't seem to be an easy adaptation to use a vernier dial sin
ce the pots are mounted on the pcb and the shaft protrudes through the case, w
hereas the vernier dial coupling mechanism needs to protrude into the case so
that the stationary part of the dial is flush with the case.
> Fred, k6kub
>
>
>
> _____
> From: Katsumi Seto <katsumi.seto@...>
> To: SS-40@yahoogroups.com
> Sent: Monday, March 26, 2012 1:03 AM
> Subject: Re: Re: [SS-40] Tuning rate....
>
>
> ?
> You can use a vernier dial with any ordinary variable resistor. If you have
n
> ot puchased the one yet, you should choose a 270 degree vernier dial for max
im
> um adjustable range. de ja7qil/katsu
>
> ----- Original Message -----
> > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > Cc: Paul <paul@...>

> > From: blackbelair <blackbelair@...>
> > Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> > Subject: Re: [SS-40] Tuning rate....
> >
> >
> > I thought a vernier dial would be nice but I think they're for variable ca
ps
> . only.
> > Fred, k6kub
> >
> >
> >
> > _____
> > From: Jim Kortge <jim.k8iqy@...>
> > To: SS-40@yahoogroups.com
> > Cc: Paul <paul@...>
> > Sent: Sunday, March 25, 2012 6:34 PM
> > Subject: Re: [SS-40] Tuning rate....
> >
> >
> > ?
> > On 3/25/2012 2:20 PM, Paul wrote:
> > > You are only tuning 10 KHz of the band.
> > >
> > > de Paul, W8AEF
> > >
> > > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
> >
> > Well actually, more like 25 to 30 KHz of the band, but a single turn
> > pot works well for this range. Above about 30 KHz, more turns are
> > very helpful.
> >
> > Just my $0.02!
> >
> > Jim, K8IQY
> >
> >
> >
>
>
>

# 446. Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-27 16:02:48 UTC
From: Lee Mairs (SAG)
Topic: 437  Message: 446

Katsu -
I am amazed at your building skills. Very neat job by both of you.
73 de Lee
KM4YY/8

On 3/27/2012 9:29 AM, Katsumi Seto wrote:
>
> It is not as difficult as you may think. See how JM2DZL mounted his vernier d
> ial below:
>
> http://jm2dzl.up.seesaa.net/image/174923114.jpg
> http://jm2dzl.up.seesaa.net/image/174922802.jpg
> He used a 300 degee vernier dial for SW40+.
>
> Mine is a much simpler method as below:
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0402.jpg
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0401.jpg
> The spacer rods were used to connect the reduction shaft and the pod.
>
> de ja7qil/katsu
>
> ----- Original Message -----
> > To: "SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>"
> <SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>>
> > From: blackbelair <blackbelair@... <mailto:blackbelair%40yahoo.com>>
> > Date: Mon, 26 Mar 2012 10:19:33 -0700 (PDT)
> > Subject: Re: Re: [SS-40] Tuning rate....
> >
> >
> > Actually, it doesn't seem to be an easy adaptation to use a vernier dial sin
> ce the pots are mounted on the pcb and the shaft protrudes through the case, w
> hereas the vernier dial coupling mechanism needs to protrude into the case so
> that the stationary part of the dial is flush with the case.
> > Fred, k6kub
> >
> >
> >
> > _____
> > From: Katsumi Seto <katsumi.seto@...
> <mailto:katsumi.seto%40nifty.com>>
> > To: SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>
> > Sent: Monday, March 26, 2012 1:03 AM
> > Subject: Re: Re: [SS-40] Tuning rate....
> >
> >

> > ?
> > You can use a vernier dial with any ordinary variable resistor. If you have
> n
> > ot puchased the one yet, you should choose a 270 degree vernier dial for max
> im
> > um adjustable range. de ja7qil/katsu
> >
> > ----- Original Message -----
> > > To: "SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>"
> <SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>>
> > > Cc: Paul <paul@... <mailto:paul%40w8aef.com>>
> > > From: blackbelair <blackbelair@... <mailto:blackbelair%40yahoo.com>>
> > > Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> > > Subject: Re: [SS-40] Tuning rate....
> > >
> > >
> > > I thought a vernier dial would be nice but I think they're for variable ca
> ps
> > . only.
> > > Fred, k6kub
> > >
> > >
> > >
> > > _____
> > > From: Jim Kortge <jim.k8iqy@... <mailto:jim.k8iqy%40gmail.com>>
> > > To: SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>
> > > Cc: Paul <paul@... <mailto:paul%40w8aef.com>>
> > > Sent: Sunday, March 25, 2012 6:34 PM
> > > Subject: Re: [SS-40] Tuning rate....
> > >
> > >
> > > ?
> > > On 3/25/2012 2:20 PM, Paul wrote:
> > > > You are only tuning 10 KHz of the band.
> > > >
> > > > de Paul, W8AEF
> > > >
> > > > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
> > >
> > > Well actually, more like 25 to 30 KHz of the band, but a single turn
> > > pot works well for this range. Above about 30 KHz, more turns are
> > > very helpful.
> > >
> > > Just my $0.02!
> > >
> > > Jim, K8IQY
> > >
> > >
> > >
> >

> >
> >
>
>

# 447. Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-27 19:32:25 UTC
From: blackbelair
Topic: 437  Message: 447

In both examples, very nice! With my vernier I trial fitted on one of the SS-40 pots and was only able to get about 75% rotation of the pot with full rotation of the vernier dial. I think you mentioned in an earlier post to use a 270 deg. vernier. Is this what is needed to get full rotation of the pot? The only spec. that my vernier has is 36mm.
73, Fred
k6kub

_____
From: Katsumi Seto <katsumi.seto@...>
To: SS-40@yahoogroups.com
Sent: Tuesday, March 27, 2012 6:29 AM
Subject: Re: Re: Re: [SS-40] Tuning rate....

It is not as difficult as you may think. See how JM2DZL mounted his vernier d
ial below:

http://jm2dzl.up.seesaa.net/image/174923114.jpg
http://jm2dzl.up.seesaa.net/image/174922802.jpg
He used a 300 degee vernier dial for SW40+.

Mine is a much simpler method as below:
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0402.jpg
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0401.jpg
The spacer rods were used to connect the reduction shaft and the pod.

de ja7qil/katsu

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> From: blackbelair <blackbelair@...>
> Date: Mon, 26 Mar 2012 10:19:33 -0700 (PDT)
> Subject: Re: Re: [SS-40] Tuning rate....
>
>
> Actually, it doesn't seem to be an easy adaptation to use a vernier dial sin
ce the pots are mounted on the pcb and the shaft protrudes through the case, w
hereas the vernier dial coupling mechanism needs to protrude into the case so
that the stationary part of the dial is flush with the case.
> Fred, k6kub
>
>
>
> _____
> From: Katsumi Seto <katsumi.seto@...>
> To: SS-40@yahoogroups.com
> Sent: Monday, March 26, 2012 1:03 AM

> Subject: Re: Re: [SS-40] Tuning rate....
>
>
> ?
> You can use a vernier dial with any ordinary variable resistor. If you have
n
> ot puchased the one yet, you should choose a 270 degree vernier dial for max
im
> um adjustable range. de ja7qil/katsu
>
> ----- Original Message -----
> > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > Cc: Paul <paul@...>
> > From: blackbelair <blackbelair@...>
> > Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> > Subject: Re: [SS-40] Tuning rate....
> >
> >
> > I thought a vernier dial would be nice but I think they're for variable ca
ps
> . only.
> > Fred, k6kub
> >
> >
> >
> > _____
> > From: Jim Kortge <jim.k8iqy@...>
> > To: SS-40@yahoogroups.com
> > Cc: Paul <paul@...>
> > Sent: Sunday, March 25, 2012 6:34 PM
> > Subject: Re: [SS-40] Tuning rate....
> >
> >
> > ?
> > On 3/25/2012 2:20 PM, Paul wrote:
> > > You are only tuning 10 KHz of the band.
> > >
> > > de Paul, W8AEF
> > >
> > > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
> >
> > Well actually, more like 25 to 30 KHz of the band, but a single turn
> > pot works well for this range. Above about 30 KHz, more turns are
> > very helpful.
> >
> > Just my $0.02!
> >
> > Jim, K8IQY
> >
> >

> >
>
>
>

# 448. Re: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-28 13:09:18 UTC
From: Katsumi Seto
Topic: 437  Message: 448

A 300 deg vernier dial is the best for the ordinary pod. Please see mine below
:
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0801.jpg

If you do not want to buy a new one, you can remove the stopper in the vernier
dial so that it can rotate 360 deg.
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0802.jpg

de ja7qil/katsu

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> From: blackbelair <blackbelair@...>
> Date: Tue, 27 Mar 2012 12:32:25 -0700 (PDT)
> Subject: Re: Re: Re: [SS-40] Tuning rate....
>
>
> In both examples, very nice! With my vernier I trial fitted on one of the SS
-40 pots and was only able to get about 75% rotation of the pot with full rota
tion of the vernier dial. I think you mentioned in an earlier post to use a 27
0 deg. vernier. Is this what is needed to get full rotation of the pot? The on
ly spec. that my vernier has is 36mm.
> 73, Fred
> k6kub
>
>
>
> _____
> From: Katsumi Seto <katsumi.seto@...>
> To: SS-40@yahoogroups.com
> Sent: Tuesday, March 27, 2012 6:29 AM
> Subject: Re: Re: Re: [SS-40] Tuning rate....
>
>
> ?
> It is not as difficult as you may think. See how JM2DZL mounted his vernier
d
> ial below:
>
> http://jm2dzl.up.seesaa.net/image/174923114.jpg
> http://jm2dzl.up.seesaa.net/image/174922802.jpg
> He used a 300 degee vernier dial for SW40+.
>
> Mine is a much simpler method as below:
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0402.jpg
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0401.jpg

> The spacer rods were used to connect the reduction shaft and the pod.
>
> de ja7qil/katsu
>
> ----- Original Message -----
> > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > From: blackbelair <blackbelair@...>
> > Date: Mon, 26 Mar 2012 10:19:33 -0700 (PDT)
> > Subject: Re: Re: [SS-40] Tuning rate....
> >
> >
> > Actually, it doesn't seem to be an easy adaptation to use a vernier dial s
in
> ce the pots are mounted on the pcb and the shaft protrudes through the case,
w
> hereas the vernier dial coupling mechanism needs to protrude into the case s
o
> that the stationary part of the dial is flush with the case.
> > Fred, k6kub
> >
> >
> >
> > _____
> > From: Katsumi Seto <katsumi.seto@...>
> > To: SS-40@yahoogroups.com
> > Sent: Monday, March 26, 2012 1:03 AM
> > Subject: Re: Re: [SS-40] Tuning rate....
> >
> >
> > ?
> > You can use a vernier dial with any ordinary variable resistor. If you ha
ve
> n
> > ot puchased the one yet, you should choose a 270 degree vernier dial for m
ax
> im
> > um adjustable range. de ja7qil/katsu
> >
> > ----- Original Message -----
> > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > Cc: Paul <paul@...>
> > > From: blackbelair <blackbelair@...>
> > > Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> > > Subject: Re: [SS-40] Tuning rate....
> > >
> > >
> > > I thought a vernier dial would be nice but I think they're for variable
ca
> ps
> > . only.

> > > Fred, k6kub
> > >
> > >
> > >
> > > _____
> > > From: Jim Kortge <jim.k8iqy@...>
> > > To: SS-40@yahoogroups.com
> > > Cc: Paul <paul@...>
> > > Sent: Sunday, March 25, 2012 6:34 PM
> > > Subject: Re: [SS-40] Tuning rate....
> > >
> > >
> > > ?
> > > On 3/25/2012 2:20 PM, Paul wrote:
> > > > You are only tuning 10 KHz of the band.
> > > >
> > > > de Paul, W8AEF
> > > >
> > > > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
> > >
> > > Well actually, more like 25 to 30 KHz of the band, but a single turn
> > > pot works well for this range. Above about 30 KHz, more turns are
> > > very helpful.
> > >
> > > Just my $0.02!
> > >
> > > Jim, K8IQY
> > >
> > >
> > >
> >
> >
> >
>
>
>

# 449. Re: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-28 20:23:32 UTC
From: blackbelair
Topic: 437  Message: 449

My vernier is numbered from 1 to 10 and seems to come just short of 180 deg. rotation. Are the 300 deg. verniers numbered from 1 to 100? Also, my vernier is 39mm total diameter. I want to use a vernier this size because it looks like it might work in a ten-tec tp-41 case. If the one you have is larger than 39mm, then most likely it won't work. What is the diameter of your 300 deg. vernier?
73, Fred
k6kub

_____
From: Katsumi Seto <katsumi.seto@...>
To: SS-40@yahoogroups.com
Sent: Wednesday, March 28, 2012 6:09 AM
Subject: Re: Re: Re: Re: [SS-40] Tuning rate....

A 300 deg vernier dial is the best for the ordinary pod. Please see mine below
:
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0801.jpg

If you do not want to buy a new one, you can remove the stopper in the vernier dial so that it can rotate 360 deg.
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0802.jpg

de ja7qil/katsu

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> From: blackbelair <blackbelair@...>
> Date: Tue, 27 Mar 2012 12:32:25 -0700 (PDT)
> Subject: Re: Re: Re: [SS-40] Tuning rate....
>
>
> In both examples, very nice! With my vernier I trial fitted on one of the SS
-40 pots and was only able to get about 75% rotation of the pot with full rota
tion of the vernier dial. I think you mentioned in an earlier post to use a 27
0 deg. vernier. Is this what is needed to get full rotation of the pot? The on
ly spec. that my vernier has is 36mm.
> 73, Fred
> k6kub
>
>
>
> _____
> From: Katsumi Seto <katsumi.seto@...m>
> To: SS-40@yahoogroups.com
> Sent: Tuesday, March 27, 2012 6:29 AM
> Subject: Re: Re: Re: [SS-40] Tuning rate....

>
>
> ?
> It is not as difficult as you may think. See how JM2DZL mounted his vernier
d
> ial below:
>
> http://jm2dzl.up.seesaa.net/image/174923114.jpg
> http://jm2dzl.up.seesaa.net/image/174922802.jpg
> He used a 300 degee vernier dial for SW40+.
>
> Mine is a much simpler method as below:
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0402.jpg
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0401.jpg
> The spacer rods were used to connect the reduction shaft and the pod.
>
> de ja7qil/katsu
>
> ----- Original Message -----
> > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > From: blackbelair <blackbelair@...>
> > Date: Mon, 26 Mar 2012 10:19:33 -0700 (PDT)
> > Subject: Re: Re: [SS-40] Tuning rate....
> >
> >
> > Actually, it doesn't seem to be an easy adaptation to use a vernier dial s
in
> ce the pots are mounted on the pcb and the shaft protrudes through the case,
w
> hereas the vernier dial coupling mechanism needs to protrude into the case s
o
> that the stationary part of the dial is flush with the case.
> > Fred, k6kub
> >
> >
> >
> > _____
> > From: Katsumi Seto <katsumi.seto@...>
> > To: SS-40@yahoogroups.com
> > Sent: Monday, March 26, 2012 1:03 AM
> > Subject: Re: Re: [SS-40] Tuning rate....
> >
> >
> > ?
> > You can use a vernier dial with any ordinary variable resistor. If you ha
ve
> n
> > ot puchased the one yet, you should choose a 270 degree vernier dial for m
ax
> im

> > um adjustable range. de ja7qil/katsu
> >
> > ----- Original Message -----
> > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > Cc: Paul <paul@...>
> > > From: blackbelair <blackbelair@...>
> > > Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> > > Subject: Re: [SS-40] Tuning rate....
> > >
> > >
> > > I thought a vernier dial would be nice but I think they're for variable
ca
> ps
> > . only.
> > > Fred, k6kub
> > >
> > >
> > >
> > > _____
> > > From: Jim Kortge <jim.k8iqy@...>
> > > To: SS-40@yahoogroups.com
> > > Cc: Paul <paul@...>
> > > Sent: Sunday, March 25, 2012 6:34 PM
> > > Subject: Re: [SS-40] Tuning rate....
> > >
> > >
> > > ?
> > > On 3/25/2012 2:20 PM, Paul wrote:
> > > > You are only tuning 10 KHz of the band.
> > > >
> > > > de Paul, W8AEF
> > > >
> > > > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
> > >
> > > Well actually, more like 25 to 30 KHz of the band, but a single turn
> > > pot works well for this range. Above about 30 KHz, more turns are
> > > very helpful.
> > >
> > > Just my $0.02!
> > >
> > > Jim, K8IQY
> > >
> > >
> > >
> >
> >
> >
>
>
>

# 450. Re: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-28 20:27:01 UTC
From: blackbelair
Topic: 437  Message: 450

... Also, I forgot to ask: Do you get full rotation of the pot with or without removing the stop?
Fred, k6kub

_____
From: Katsumi Seto <katsumi.seto@...>
To: SS-40@yahoogroups.com
Sent: Wednesday, March 28, 2012 6:09 AM
Subject: Re: Re: Re: Re: [SS-40] Tuning rate....

A 300 deg vernier dial is the best for the ordinary pod. Please see mine below
:
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0801.jpg

If you do not want to buy a new one, you can remove the stopper in the vernier dial so that it can rotate 360 deg.
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0802.jpg

de ja7qil/katsu

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> From: blackbelair <blackbelair@...>
> Date: Tue, 27 Mar 2012 12:32:25 -0700 (PDT)
> Subject: Re: Re: Re: [SS-40] Tuning rate....
>
>
> In both examples, very nice! With my vernier I trial fitted on one of the SS
-40 pots and was only able to get about 75% rotation of the pot with full rota
tion of the vernier dial. I think you mentioned in an earlier post to use a 27
0 deg. vernier. Is this what is needed to get full rotation of the pot? The on
ly spec. that my vernier has is 36mm.
> 73, Fred
> k6kub
>
>
>
> _____
> From: Katsumi Seto <katsumi.seto@nifty.com>
> To: SS-40@yahoogroups.com
> Sent: Tuesday, March 27, 2012 6:29 AM
> Subject: Re: Re: Re: [SS-40] Tuning rate....
>
>
> ?
> It is not as difficult as you may think. See how JM2DZL mounted his vernier

d
> ial below:
>
> http://jm2dzl.up.seesaa.net/image/174923114.jpg
> http://jm2dzl.up.seesaa.net/image/174922802.jpg
> He used a 300 degee vernier dial for SW40+.
>
> Mine is a much simpler method as below:
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0402.jpg
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0401.jpg
> The spacer rods were used to connect the reduction shaft and the pod.
>
> de ja7qil/katsu
>
> ----- Original Message -----
> > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > From: blackbelair <blackbelair@...>
> > Date: Mon, 26 Mar 2012 10:19:33 -0700 (PDT)
> > Subject: Re: Re: [SS-40] Tuning rate....
> >
> >
> > Actually, it doesn't seem to be an easy adaptation to use a vernier dial s
in
> ce the pots are mounted on the pcb and the shaft protrudes through the case,
w
> hereas the vernier dial coupling mechanism needs to protrude into the case s
o
> that the stationary part of the dial is flush with the case.
> > Fred, k6kub
> >
> >
> >
> > _____
> > From: Katsumi Seto <katsumi.seto@...>
> > To: SS-40@yahoogroups.com
> > Sent: Monday, March 26, 2012 1:03 AM
> > Subject: Re: Re: [SS-40] Tuning rate....
> >
> >
> > ?
> > You can use a vernier dial with any ordinary variable resistor. If you ha
ve
> n
> > ot puchased the one yet, you should choose a 270 degree vernier dial for m
ax
> im
> > um adjustable range. de ja7qil/katsu
> >
> > ----- Original Message -----
> > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>

> > > Cc: Paul <paul@...>
> > > From: blackbelair <blackbelair@...>
> > > Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> > > Subject: Re: [SS-40] Tuning rate....
> > >
> > >
> > > I thought a vernier dial would be nice but I think they're for variable
ca
> ps
> > . only.
> > > Fred, k6kub
> > >
> > >
> > >
> > > _____
> > > From: Jim Kortge <jim.k8iqy@...>
> > > To: SS-40@yahoogroups.com
> > > Cc: Paul <paul@...>
> > > Sent: Sunday, March 25, 2012 6:34 PM
> > > Subject: Re: [SS-40] Tuning rate....
> > >
> > >
> > > ?
> > > On 3/25/2012 2:20 PM, Paul wrote:
> > > > You are only tuning 10 KHz of the band.
> > > >
> > > > de Paul, W8AEF
> > > >
> > > > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
> > >
> > > Well actually, more like 25 to 30 KHz of the band, but a single turn
> > > pot works well for this range. Above about 30 KHz, more turns are
> > > very helpful.
> > >
> > > Just my $0.02!
> > >
> > > Jim, K8IQY
> > >
> > >
> > >
> >
> >
> >
>
>
>

# 451. RE: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-28 20:32:41 UTC
From: Jake, ON4YZ
Topic: 437  Message: 451

Very interesting. Does someone know a source for vernier dial knobs 300 or 270 degrees. I've been searching internet : nothing found. Help most appreciated.

73 dee Jake - ON4YZ

>> A 300 deg vernier dial is the best for the ordinary pod

# 452. RE: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-29 06:50:37 UTC
From: Stephen Farthing
Topic: 437  Message: 452

This guy does new vernier tuning knobs but they seem a bit expensive :-

http://www.minute-man.com/acatalog/Vernier_Dial_for_Potentiometers.html

The $20 minimum order might mean you have to buy more than one - possibly there is scope for a group buy.

For those that are good with tools and fancy a nostalgic interface :-

http://theradioboard.com/rb/viewtopic.php?t=1674

I am not sure what you call MDF in the rest of the world - it is a wood fibre board used to make shelves and flat pack furniture. So I guess if you want to make this any workable insulator will do.

73s from a very sunny England,

Steve G0XAR

--
Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful. E. F. Schumacher

# 453. Re: Re: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-29 22:20:19 UTC
From: Katsumi Seto
Topic: 437  Message: 453

Hi

> Are the 300 deg. verniers numbered from 1 to 100?

Yes, mine has 1 to 100.

> my vernier is 39mm total diameter.

Mine is 36 mm dia.

Probably I am located better than anyone else in this forum. I am working in the center of Tokyo, less than 10 minute subway ride to "Akihabara" or Mecca o f radio kids. Talking about vernier dials, I bought two pieces in my lunch br eak yesterday below:

This vernier is VERY CUTE. 30mm dia. and 300 degree. It costs around 20US$.
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0901.jpg

Another piece is a reduction shaft. This can be used to assemble an analog dia l. It costs 16USD.
http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0902.jpg

de ja7qil/katsu

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> From: blackbelair <blackbelair@...>
> Date: Wed, 28 Mar 2012 13:23:32 -0700 (PDT)
> Subject: Re: Re: Re: Re: [SS-40] Tuning rate....
>
>
> My vernier is numbered from 1 to 10 and seems to come just short of 180 deg. rotation. Are the 300 deg. verniers numbered from 1 to 100? Also, my vernier is 39mm total diameter. I want to use a vernier this size because it looks lik e it might work in a ten-tec tp-41 case. If the one you have is larger than 39 mm, then most likely it won't work. What is the diameter of your 300 deg. vern ier?
> 73, Fred
> k6kub
>
>
>
> _____
> From: Katsumi Seto <katsumi.seto@...>
> To: SS-40@yahoogroups.com
> Sent: Wednesday, March 28, 2012 6:09 AM
> Subject: Re: Re: Re: Re: [SS-40] Tuning rate....

>
>
> ?
> A 300 deg vernier dial is the best for the ordinary pod. Please see mine bel
ow
> :
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0801.jpg
>
> If you do not want to buy a new one, you can remove the stopper in the verni
er
> dial so that it can rotate 360 deg.
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0802.jpg
>
> de ja7qil/katsu
>
> ----- Original Message -----
> > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > From: blackbelair <blackbelair@...>
> > Date: Tue, 27 Mar 2012 12:32:25 -0700 (PDT)
> > Subject: Re: Re: Re: [SS-40] Tuning rate....
> >
> >
> > In both examples, very nice! With my vernier I trial fitted on one of the
SS
> -40 pots and was only able to get about 75% rotation of the pot with full ro
ta
> tion of the vernier dial. I think you mentioned in an earlier post to use a
27
> 0 deg. vernier. Is this what is needed to get full rotation of the pot? The
on
> ly spec. that my vernier has is 36mm.
> > 73, Fred
> > k6kub
> >
> >
> >
> > _____
> > From: Katsumi Seto <katsumi.seto@...>
> > To: SS-40@yahoogroups.com
> > Sent: Tuesday, March 27, 2012 6:29 AM
> > Subject: Re: Re: Re: [SS-40] Tuning rate....
> >
> >
> > ?
> > It is not as difficult as you may think. See how JM2DZL mounted his verni
er
> d
> > ial below:
> >
> > http://jm2dzl.up.seesaa.net/image/174923114.jpg

> > http://jm2dzl.up.seesaa.net/image/174922802.jpg
> > He used a 300 degee vernier dial for SW40+.
> >
> > Mine is a much simpler method as below:
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0402.jpg
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0401.jpg
> > The spacer rods were used to connect the reduction shaft and the pod.
> >
> > de ja7qil/katsu
> >
> > ----- Original Message -----
> > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > From: blackbelair <blackbelair@...>
> > > Date: Mon, 26 Mar 2012 10:19:33 -0700 (PDT)
> > > Subject: Re: Re: [SS-40] Tuning rate....
> > >
> > >
> > > Actually, it doesn't seem to be an easy adaptation to use a vernier dial
s
> in
> > ce the pots are mounted on the pcb and the shaft protrudes through the cas
e,
> w
> > hereas the vernier dial coupling mechanism needs to protrude into the case
s
> o
> > that the stationary part of the dial is flush with the case.
> > > Fred, k6kub
> > >
> > >
> > >
> > > _____
> > > From: Katsumi Seto <katsumi.seto@...>
> > > To: SS-40@yahoogroups.com
> > > Sent: Monday, March 26, 2012 1:03 AM
> > > Subject: Re: Re: [SS-40] Tuning rate....
> > >
> > >
> > > ?
> > > You can use a vernier dial with any ordinary variable resistor. If you
ha
> ve
> > n
> > > ot puchased the one yet, you should choose a 270 degree vernier dial for
m
> ax
> > im
> > > um adjustable range. de ja7qil/katsu
> > >
> > > ----- Original Message -----

> > > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > > Cc: Paul <paul@...>
> > > > From: blackbelair <blackbelair@...>
> > > > Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> > > > Subject: Re: [SS-40] Tuning rate....
> > > >
> > > >
> > > > I thought a vernier dial would be nice but I think they're for variabl
e
> ca
> > ps
> > > . only.
> > > > Fred, k6kub
> > > >
> > > >
> > > >
> > > > _____
> > > > From: Jim Kortge <jim.k8iqy@...>
> > > > To: SS-40@yahoogroups.com
> > > > Cc: Paul <paul@...>
> > > > Sent: Sunday, March 25, 2012 6:34 PM
> > > > Subject: Re: [SS-40] Tuning rate....
> > > >
> > > >
> > > > ?
> > > > On 3/25/2012 2:20 PM, Paul wrote:
> > > > > You are only tuning 10 KHz of the band.
> > > > >
> > > > > de Paul, W8AEF
> > > > >
> > > > > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
> > > >
> > > > Well actually, more like 25 to 30 KHz of the band, but a single turn
> > > > pot works well for this range. Above about 30 KHz, more turns are
> > > > very helpful.
> > > >
> > > > Just my $0.02!
> > > >
> > > > Jim, K8IQY
> > > >
> > > >
> > > >
> > >
> > >
> > >
> >
> >
> >
>
>

>

# 454. Re: Re: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-29 22:24:57 UTC
From: Katsumi Seto
Topic: 437  Message: 454

You have to remove the stop to get full rotation. Try! Katsu, ja7qil

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> From: blackbelair <blackbelair@...>
> Date: Wed, 28 Mar 2012 13:27:01 -0700 (PDT)
> Subject: Re: Re: Re: Re: [SS-40] Tuning rate....
>
>
> ... Also, I forgot to ask: Do you get full rotation of the pot with or witho
ut removing the stop?
> Fred, k6kub
>
>
>
> _____
> From: Katsumi Seto <katsumi.seto@...>
> To: SS-40@yahoogroups.com
> Sent: Wednesday, March 28, 2012 6:09 AM
> Subject: Re: Re: Re: Re: [SS-40] Tuning rate....
>
>
> ?
> A 300 deg vernier dial is the best for the ordinary pod. Please see mine bel
ow
> :
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0801.jpg
>
> If you do not want to buy a new one, you can remove the stopper in the verni
er
> dial so that it can rotate 360 deg.
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0802.jpg
>
> de ja7qil/katsu
>
> ----- Original Message -----
> > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > From: blackbelair <blackbelair@...>
> > Date: Tue, 27 Mar 2012 12:32:25 -0700 (PDT)
> > Subject: Re: Re: Re: [SS-40] Tuning rate....
> >
> >
> > In both examples, very nice! With my vernier I trial fitted on one of the
SS
> -40 pots and was only able to get about 75% rotation of the pot with full ro

ta
> tion of the vernier dial. I think you mentioned in an earlier post to use a
27
> 0 deg. vernier. Is this what is needed to get full rotation of the pot? The
on
> ly spec. that my vernier has is 36mm.
> > 73, Fred
> > k6kub
> >
> >
> >
> > _____
> > From: Katsumi Seto <katsumi.seto@...>
> > To: SS-40@yahoogroups.com
> > Sent: Tuesday, March 27, 2012 6:29 AM
> > Subject: Re: Re: Re: [SS-40] Tuning rate....
> >
> >
> > ?
> > It is not as difficult as you may think. See how JM2DZL mounted his verni
er
> d
> > ial below:
> >
> > http://jm2dzl.up.seesaa.net/image/174923114.jpg
> > http://jm2dzl.up.seesaa.net/image/174922802.jpg
> > He used a 300 degee vernier dial for SW40+.
> >
> > Mine is a much simpler method as below:
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0402.jpg
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0401.jpg
> > The spacer rods were used to connect the reduction shaft and the pod.
> >
> > de ja7qil/katsu
> >
> > ----- Original Message -----
> > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > From: blackbelair <blackbelair@...>
> > > Date: Mon, 26 Mar 2012 10:19:33 -0700 (PDT)
> > > Subject: Re: Re: [SS-40] Tuning rate....
> > >
> > >
> > > Actually, it doesn't seem to be an easy adaptation to use a vernier dial
s
> in
> > ce the pots are mounted on the pcb and the shaft protrudes through the cas
e,
> w
> > hereas the vernier dial coupling mechanism needs to protrude into the case
s

> o
> > that the stationary part of the dial is flush with the case.
> > > Fred, k6kub
> > >
> > >
> > >
> > > _____
> > > From: Katsumi Seto <katsumi.seto@...>
> > > To: SS-40@yahoogroups.com
> > > Sent: Monday, March 26, 2012 1:03 AM
> > > Subject: Re: Re: [SS-40] Tuning rate....
> > >
> > >
> > > ?
> > > You can use a vernier dial with any ordinary variable resistor. If you
ha
> ve
> > n
> > > ot puchased the one yet, you should choose a 270 degree vernier dial for
m
> ax
> > im
> > > um adjustable range. de ja7qil/katsu
> > >
> > > ----- Original Message -----
> > > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > > Cc: Paul <paul@...>
> > > > From: blackbelair <blackbelair@...>
> > > > Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> > > > Subject: Re: [SS-40] Tuning rate....
> > > >
> > > >
> > > > I thought a vernier dial would be nice but I think they're for variabl
e
> ca
> > ps
> > > . only.
> > > > Fred, k6kub
> > > >
> > > >
> > > >
> > > > _____
> > > > From: Jim Kortge <jim.k8iqy@...>
> > > > To: SS-40@yahoogroups.com
> > > > Cc: Paul <paul@...>
> > > > Sent: Sunday, March 25, 2012 6:34 PM
> > > > Subject: Re: [SS-40] Tuning rate....
> > > >
> > > >
> > > > ?

> > > > On 3/25/2012 2:20 PM, Paul wrote:
> > > > > You are only tuning 10 KHz of the band.
> > > > >
> > > > > de Paul, W8AEF
> > > > >
> > > > > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
> > > >
> > > > Well actually, more like 25 to 30 KHz of the band, but a single turn
> > > > pot works well for this range. Above about 30 KHz, more turns are
> > > > very helpful.
> > > >
> > > > Just my $0.02!
> > > >
> > > > Jim, K8IQY
> > > >
> > > >
> > > >
> > >
> > >
> > >
> >
> >
> >
>
>
>

# 455. Re: RE: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-30 01:37:50 UTC
From: Katsumi Seto
Topic: 437  Message: 455

300 deg vernier is commonly availabe in Japan. I bought it at the shop below.
I am not sure if they can take foreign orders.

http://www.marumo-p.com/item/m42-5-002.html

The vernier dial above is good quality but pretty expensive. It costs around U
SD 20.

Less expensive, chinese made is also available. 38mm dia, 270 deg. 550 yen aro
und USD 7.

http://www.radioboy.org/buhin/index.htm

I do not think they can take forign orders.

de ja7qil, katsu

----- Original Message -----
> To: <SS-40@yahoogroups.com>
> From: "Jake, ON4YZ" <jacques.matlet@...>
> Date: Wed, 28 Mar 2012 22:32:41 +0200
> Subject: RE: Re: Re: Re: [SS-40] Tuning rate....
>
>
> Very interesting. Does someone know a source for vernier dial knobs 300 or
> 270 degrees. I've been searching internet : nothing found. Help most
> appreciated.
>
> 73 dee Jake - ON4YZ
>
>
>
> >> A 300 deg vernier dial is the best for the ordinary pod
>

# 456. Re: Re: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-03-30 22:12:06 UTC
From: blackbelair
Topic: 437  Message: 456

Thanks for the help, Katsu. I want to mount a vernier dial in a Ten-Tec TP-41 case. It looks like the pcb would need to be lowered by nearly 6mm so that the dial pointer is below the top cover. I might play with it.
Fred, k6kub

_____
From: Katsumi Seto <katsumi.seto@nifty.com>
To: SS-40@yahoogroups.com
Sent: Thursday, March 29, 2012 3:24 PM
Subject: Re: Re: Re: Re: Re: [SS-40] Tuning rate....

You have to remove the stop to get full rotation. Try! Katsu, ja7qil

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> From: blackbelair <blackbelair@...>
> Date: Wed, 28 Mar 2012 13:27:01 -0700 (PDT)
> Subject: Re: Re: Re: Re: [SS-40] Tuning rate....
>
>
> ... Also, I forgot to ask: Do you get full rotation of the pot with or witho
ut removing the stop?
> Fred, k6kub
>
>
>
> _____
> From: Katsumi Seto <katsumi.seto@...>
> To: SS-40@yahoogroups.com
> Sent: Wednesday, March 28, 2012 6:09 AM
> Subject: Re: Re: Re: Re: [SS-40] Tuning rate....
>
>
> ?
> A 300 deg vernier dial is the best for the ordinary pod. Please see mine bel
ow
> :
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0801.jpg
>
> If you do not want to buy a new one, you can remove the stopper in the verni
er
> dial so that it can rotate 360 deg.
> http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0802.jpg
>
> de ja7qil/katsu
>

> ----- Original Message -----
> > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > From: blackbelair <blackbelair@yahoo.com>
> > Date: Tue, 27 Mar 2012 12:32:25 -0700 (PDT)
> > Subject: Re: Re: Re: [SS-40] Tuning rate....
> >
> >
> > In both examples, very nice! With my vernier I trial fitted on one of the
SS
> -40 pots and was only able to get about 75% rotation of the pot with full ro
ta
> tion of the vernier dial. I think you mentioned in an earlier post to use a
27
> 0 deg. vernier. Is this what is needed to get full rotation of the pot? The
on
> ly spec. that my vernier has is 36mm.
> > 73, Fred
> > k6kub
> >
> >
> >
> > _____
> > From: Katsumi Seto <katsumi.seto@nifty.com>
> > To: SS-40@yahoogroups.com
> > Sent: Tuesday, March 27, 2012 6:29 AM
> > Subject: Re: Re: Re: [SS-40] Tuning rate....
> >
> >
> > ?
> > It is not as difficult as you may think. See how JM2DZL mounted his verni
er
> d
> > ial below:
> >
> > http://jm2dzl.up.seesaa.net/image/174923114.jpg
> > http://jm2dzl.up.seesaa.net/image/174922802.jpg
> > He used a 300 degee vernier dial for SW40+.
> >
> > Mine is a much simpler method as below:
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0402.jpg
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0401.jpg
> > The spacer rods were used to connect the reduction shaft and the pod.
> >
> > de ja7qil/katsu
> >
> > ----- Original Message -----
> > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > From: blackbelair <blackbelair@...>
> > > Date: Mon, 26 Mar 2012 10:19:33 -0700 (PDT)
> > > Subject: Re: Re: [SS-40] Tuning rate....

> > >
> > >
> > > Actually, it doesn't seem to be an easy adaptation to use a vernier dial
s
> in
> > ce the pots are mounted on the pcb and the shaft protrudes through the cas
e,
> w
> > hereas the vernier dial coupling mechanism needs to protrude into the case
s
> o
> > that the stationary part of the dial is flush with the case.
> > > Fred, k6kub
> > >
> > >
> > >
> > > _____
> > > From: Katsumi Seto <katsumi.seto@...>
> > > To: SS-40@yahoogroups.com
> > > Sent: Monday, March 26, 2012 1:03 AM
> > > Subject: Re: Re: [SS-40] Tuning rate....
> > >
> > >
> > > ?
> > > You can use a vernier dial with any ordinary variable resistor. If you
ha
> ve
> > n
> > > ot puchased the one yet, you should choose a 270 degree vernier dial for
m
> ax
> > im
> > > um adjustable range. de ja7qil/katsu
> > >
> > > ----- Original Message -----
> > > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > > Cc: Paul <paul@...>
> > > > From: blackbelair <blackbelair@yahoo.com>
> > > > Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> > > > Subject: Re: [SS-40] Tuning rate....
> > > >
> > > >
> > > > I thought a vernier dial would be nice but I think they're for variabl
e
> ca
> > ps
> > > . only.
> > > > Fred, k6kub
> > > >
> > > >

> > > >
> > > > _____
> > > > From: Jim Kortge <jim.k8iqy@...>
> > > > To: SS-40@yahoogroups.com
> > > > Cc: Paul <paul@...>
> > > > Sent: Sunday, March 25, 2012 6:34 PM
> > > > Subject: Re: [SS-40] Tuning rate....
> > > >
> > > >
> > > > ?
> > > > On 3/25/2012 2:20 PM, Paul wrote:
> > > > > You are only tuning 10 KHz of the band.
> > > > >
> > > > > de Paul, W8AEF
> > > > >
> > > > > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP
> > > >
> > > > Well actually, more like 25 to 30 KHz of the band, but a single turn
> > > > pot works well for this range. Above about 30 KHz, more turns are
> > > > very helpful.
> > > >
> > > > Just my $0.02!
> > > >
> > > > Jim, K8IQY
> > > >
> > > >
> > > >
> > >
> > >
> > >
> >
> >
> >
>
>
>

# 457. Re: Re: Re: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-04-01 01:05:19 UTC
From: Katsumi Seto
Topic: 437  Message: 457

Hi Fred

Yes. Obviously the pod cannot be mounted on the pcb if you want to use a vern
ier dial. As you see my assembly, it turned the pcb 180 deg.

http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0603.jpg

de ja7qil/katsu

----- Original Message -----
> To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> From: blackbelair <blackbelair@...>
> Date: Fri, 30 Mar 2012 15:12:06 -0700 (PDT)
> Subject: Re: Re: Re: Re: Re: [SS-40] Tuning rate....
>
>
> Thanks for the help, Katsu. I want to mount a vernier dial in a Ten-Tec TP-4
1 case. It looks like the pcb would need to be lowered by nearly 6mm so that t
he dial pointer is below the top cover. I might play with it.
> Fred, k6kub
>
>
>
> _____
> From: Katsumi Seto <katsumi.seto@...>
> To: SS-40@yahoogroups.com
> Sent: Thursday, March 29, 2012 3:24 PM
> Subject: Re: Re: Re: Re: Re: [SS-40] Tuning rate....
>
>
> ?
> You have to remove the stop to get full rotation. Try! Katsu, ja7qil
>
> ----- Original Message -----
> > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > From: blackbelair <blackbelair@...>
> > Date: Wed, 28 Mar 2012 13:27:01 -0700 (PDT)
> > Subject: Re: Re: Re: Re: [SS-40] Tuning rate....
> >
> >
> > ... Also, I forgot to ask: Do you get full rotation of the pot with or wit
ho
> ut removing the stop?
> > Fred, k6kub
> >
> >

> >
> > _____
> > From: Katsumi Seto <katsumi.seto@...>
> > To: SS-40@yahoogroups.com
> > Sent: Wednesday, March 28, 2012 6:09 AM
> > Subject: Re: Re: Re: Re: [SS-40] Tuning rate....
> >
> >
> > ?
> > A 300 deg vernier dial is the best for the ordinary pod. Please see mine b
el
> ow
> > :
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0801.jpg
> >
> > If you do not want to buy a new one, you can remove the stopper in the ver
ni
> er
> > dial so that it can rotate 360 deg.
> > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0802.jpg
> >
> > de ja7qil/katsu
> >
> > ----- Original Message -----
> > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > From: blackbelair <blackbelair@...>
> > > Date: Tue, 27 Mar 2012 12:32:25 -0700 (PDT)
> > > Subject: Re: Re: Re: [SS-40] Tuning rate....
> > > >
> > > >
> > > In both examples, very nice! With my vernier I trial fitted on one of th
e
> SS
> > -40 pots and was only able to get about 75% rotation of the pot with full
ro
> ta
> > tion of the vernier dial. I think you mentioned in an earlier post to use
a
> 27
> > 0 deg. vernier. Is this what is needed to get full rotation of the pot? Th
e
> on
> > ly spec. that my vernier has is 36mm.
> > > 73, Fred
> > > k6kub
> > >
> > >
> > >
> > > _____
> > > From: Katsumi Seto <katsumi.seto@...>

> > > To: SS-40@yahoogroups.com
> > > Sent: Tuesday, March 27, 2012 6:29 AM
> > > Subject: Re: Re: Re: [SS-40] Tuning rate....
> > >
> > >
> > > ?
> > > It is not as difficult as you may think. See how JM2DZL mounted his ver
ni
> er
> > d
> > > ial below:
> > >
> > > http://jm2dzl.up.seesaa.net/image/174923114.jpg
> > > http://jm2dzl.up.seesaa.net/image/174922802.jpg
> > > He used a 300 degee vernier dial for SW40+.
> > >
> > > Mine is a much simpler method as below:
> > > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0402.jpg
> > > http://homepage3.nifty.com/VYG06610/A1C/SS40/JA7QIL_SS40_0401.jpg
> > > The spacer rods were used to connect the reduction shaft and the pod.
> > >
> > > de ja7qil/katsu
> > >
> > > ----- Original Message -----
> > > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > > From: blackbelair <blackbelair@...>
> > > > Date: Mon, 26 Mar 2012 10:19:33 -0700 (PDT)
> > > > Subject: Re: Re: [SS-40] Tuning rate....
> > > > >
> > > > >
> > > > > Actually, it doesn't seem to be an easy adaptation to use a vernier di
al
> s
> > in
> > > ce the pots are mounted on the pcb and the shaft protrudes through the c
as
> e,
> > w
> > > hereas the vernier dial coupling mechanism needs to protrude into the ca
se
> s
> > o
> > > that the stationary part of the dial is flush with the case.
> > > > Fred, k6kub
> > > > >
> > > > >
> > > > >
> > > > _____
> > > > From: Katsumi Seto <katsumi.seto@...>
> > > > To: SS-40@yahoogroups.com

> > > > Sent: Monday, March 26, 2012 1:03 AM
> > > > Subject: Re: Re: [SS-40] Tuning rate....
> > > >
> > > >
> > > > ?
> > > > You can use a vernier dial with any ordinary variable resistor. If yo
u
> ha
> > ve
> > > n
> > > > ot puchased the one yet, you should choose a 270 degree vernier dial f
or
> m
> > ax
> > > im
> > > > um adjustable range. de ja7qil/katsu
> > > >
> > > > ----- Original Message -----
> > > > > To: "SS-40@yahoogroups.com" <SS-40@yahoogroups.com>
> > > > > Cc: Paul <paul@...>
> > > > > From: blackbelair <blackbelair@...>
> > > > > Date: Sun, 25 Mar 2012 20:43:57 -0700 (PDT)
> > > > > Subject: Re: [SS-40] Tuning rate....
> > > > >
> > > > >
> > > > > I thought a vernier dial would be nice but I think they're for varia
bl
> e
> > ca
> > > ps
> > > > . only.
> > > > > Fred, k6kub
> > > > >
> > > > >
> > > > >
> > > > > _____
> > > > > From: Jim Kortge <jim.k8iqy@...>
> > > > > To: SS-40@yahoogroups.com
> > > > > Cc: Paul <paul@...>
> > > > > Sent: Sunday, March 25, 2012 6:34 PM
> > > > > Subject: Re: [SS-40] Tuning rate....
> > > > >
> > > > >
> > > > > ?
> > > > > On 3/25/2012 2:20 PM, Paul wrote:
> > > > > > You are only tuning 10 KHz of the band.
> > > > > >
> > > > > > de Paul, W8AEF
> > > > > >
> > > > > > ZF2JI/ZF2TA 8Q7AA FO8DX/FO0PLA XZ0A VU7RG/VU3PYM TX5A A52PP

> > > > >
> > > > > Well actually, more like 25 to 30 KHz of the band, but a single turn

> > > > > pot works well for this range. Above about 30 KHz, more turns are
> > > > > very helpful.
> > > > >
> > > > > Just my $0.02!
> > > > >
> > > > > Jim, K8IQY
> > > > >
> > > > >
> > > > >
> > > > >
> > > > >
> > > > >
> > >
> > >
> > >
> >
> >
> >
>
>
>

# 458. Re: RE: Re: Re: Re: [SS-40] Tuning rate....

Yahoo group: SS-40
Date: 2012-04-03 03:15:22 UTC
From: Katsumi Seto
Topic: 437  Message: 458

Hi Jake

If you really need a 300 deg one, I can locally buy and send it to you. Please write me direct to my e-mail address.

Br//Seto

----- Original Message -----
> To: <SS-40@yahoogroups.com>
> From: "Jake, ON4YZ" <jacques.matlet@...>
> Date: Wed, 28 Mar 2012 22:32:41 +0200
> Subject: RE: Re: Re: Re: [SS-40] Tuning rate....
>
>
> Very interesting. Does someone know a source for vernier dial knobs 300 or
> 270 degrees. I've been searching internet : nothing found. Help most
> appreciated.
>
> 73 dee Jake - ON4YZ
>
>
>
> >> A 300 deg vernier dial is the best for the ordinary pod
>

# 459. Interfacing a counter to the SS-40

Yahoo group: SS-40
Date: 2012-04-14 04:44:38 UTC
From: Chris Waldrup
Topic: 459  Message: 459

I just finished a Steve Weber Digital Dial board and would like to implement it with my SS-40.
I know some have built a counter into their receiver and would like to know which point in the circuit is the best place to sample the signal. I think I need to tap some of the LO but not load the circuit, and I can input an offset in the digital dial board.
Thanks!

Chris
KD4PBJ

# 460. Re: SS-40 works fine!

Yahoo group: SS-40
Date: 2012-04-15 12:42:57 UTC
From: Stephen
Topic: 358  Message: 460

Hi Guys,

I can confirm that at the end of Step 10 my readings for the VFO output are 1.8-3.18 peak to peak volts depending on the setting of the preset pot. It was measured on a Hantek DS05120B Digital Oscilloscope. The VFO outputs a pretty much perfect sine wave. Am I to assume that this output level is OK or do I need more?

73s from a breezy England, wishing I was at Ozarcon!

Steve G0XAR

# 461. Re: Interfacing a counter to the SS-40

Yahoo group: SS-40
Date: 2012-04-15 20:30:14 UTC
From: Paul
Topic: 459  Message: 461

Haven't tried it myself, but there were some messages in this group some months back. One of the recommendations was to wind a link around T1 (binocular ferrite matching VFO to mixer)

Paul - K0EET

--- In SS-40@yahoogroups.com, Chris Waldrup <kd4pbj@...> wrote:
>
> I just finished a Steve Weber Digital Dial board and would like to
> implement it with my SS-40.
> I know some have built a counter into their receiver and would like to
> know which point in the circuit is the best place to sample the
> signal. I think I need to tap some of the LO but not load the circuit,
> and I can input an offset in the digital dial board.
> Thanks!
>
> Chris
> KD4PBJ
>

# 462. Re: SS-40 works fine!

Yahoo group: SS-40
Date: 2012-04-15 20:36:12 UTC
From: Paul
Topic: 358  Message: 462

Several guys were measuring a bit low at this step (including me) according to the level noted in the manual. None of us had any trouble running with it this way.

Ozarkcon was great, as usual.

Paul - K0EET

--- In SS-40@yahoogroups.com, "Stephen" <squirrox@...> wrote:
>
> Hi Guys,
>
> I can confirm that at the end of Step 10 my readings for the VFO output are 1.8-3.18 peak to peak volts depending on the setting of the preset pot. It was measured on a Hantek DS05120B Digital Oscilloscope. The VFO outputs a pretty much perfect sine wave. Am I to assume that this output level is OK or do I need more?
>
> 73s from a breezy England, wishing I was at Ozarcon!
>
> Steve G0XAR
>

# 463. the transmitter

Yahoo group: SS-40
Date: 2012-04-16 12:20:23 UTC
From: pileupjunkie
Topic: 463  Message: 463

I recall the TX with the parts embedded in the board,
maybe i saw it on anothe list or a web page,
can someone direct me to that?
Thanks
bob
aF2q

# 464. Re: [SS-40] the transmitter

Yahoo group: SS-40
Date: 2012-04-16 13:01:39 UTC
From: WA0ITP
Topic: 463  Message: 464

This one? http://www.wa0itp.com/ns40.html
---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "pileupjunkie" <beargyrils@...>
To: <SS-40@yahoogroups.com>
Sent: Monday, April 16, 2012 7:20 AM
Subject: [SS-40] the transmitter

|I recall the TX with the parts embedded in the board,
| maybe i saw it on anothe list or a web page,
| can someone direct me to that?
| Thanks
| bob
| aF2q
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 465. Re: [SS-40] Interfacing a counter to the SS-40

Yahoo group: SS-40
Date: 2012-04-20 19:14:23 UTC
From: Jim Kortge
Topic: 459 Message: 465

On 4/14/2012 12:44 AM, Chris Waldrup wrote:
> I just finished a Steve Weber Digital Dial board and would like to
> implement it with my SS-40.
> I know some have built a counter into their receiver and would like to
> know which point in the circuit is the best place to sample the
> signal.

Either on the emitter of the buffer amp or push a wire through one side of T1 and and ground one end and used the free lead to send signal to the Digital Dial. I'm sure the latter will supply enough signel. If hooking to the emitter of the amp, use a very small capacitor, something around 4.7 pF or smaller. A small "gimmick" capacitor should work fine too.

I think I need to tap some of the LO but not load the circuit,
> and I can input an offset in the digital dial board.

Yes, you will have to offset the digital dial to make the frequency readout correct. Perhaps others who have connected a digital dial to their receiver will sound off and tell us how they did it.

> Thanks!
>
Please let us know what you did Chris.

> Chris
> KD4PBJ

72,

Jim, K8IQY

PS...back from Ozarkcon. What a good time that was!!!!

# 466. Just Ordered SS40 and Super VXO for separate Transmitter

Yahoo group: SS-40
Date: 2012-04-29 12:48:09 UTC
From: Guy
Topic: 466  Message: 466

Just ordered my SS40..
Plans are to have separate receiver and transmitter tie together with some sort of TR switch arrangement (MagicBox? when it becomes available again?). Like the old days... :-)

The transmitter and LPF will be the ones from kits and parts (I have these already)
http://www.kitsandparts.com/qrp_amp2.php
http://www.kitsandparts.com/univlpfilter.php
Used with the SuperVXO...
Maybe a vernier or multiturn pot along with maybe a Small Wonder Labs Freq-Mite...
still thinking...
Anyway, looking to have some fun building these.. :-)

Thanks to the 4 State QRP group !

73/ AI1G (Guy)

# 467. Re: [SS-40] Just Ordered SS40 and Super VXO for separate Transmitter

Yahoo group: SS-40
Date: 2012-04-29 15:02:19 UTC
From: WA0ITP
Topic: 466  Message: 467

GM Guy,

Thank you for your orders. You will have a fine 40M station, Diz provides good kits.. Parts are being ordered now for the Magic Box, it should be ready in 3-4 weeks, hopefully.

---
I love this radio stuff !
72, 73 Terry, WA?ITP
wa0itp@...
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "Guy" <tombombadillo@...>
To: <SS-40@yahoogroups.com>
Sent: Sunday, April 29, 2012 7:48 AM
Subject: [SS-40] Just Ordered SS40 and Super VXO for separate Transmitter

| Just ordered my SS40..
| Plans are to have separate receiver and transmitter tie together with some sort of TR switch arrangement (MagicBox? when it becomes available again?). Like the old days... :-)
|
| The transmitter and LPF will be the ones from kits and parts (I have these already)
| http://www.kitsandparts.com/qrp_amp2.php
| http://www.kitsandparts.com/univlpfilter.php
| Used with the SuperVXO...
| Maybe a vernier or multiturn pot along with maybe a Small Wonder Labs Freq-Mite...
| still thinking...
| Anyway, looking to have some fun building these.. :-)
|
| Thanks to the 4 State QRP group !
|
| 73/ AI1G (Guy)
|
|
|
| ---
|
| Yahoo! Groups Links
|

|
|

# 468. SS 30?

Yahoo group: SS-40
Date: 2012-05-03 22:35:30 UTC
From: davidmccreery62
Topic: 468  Message: 468

How about an SS 30? 10mgs is a great band for low power dx. Dave

# 469. Re: SS 30?

Yahoo group: SS-40
Date: 2012-05-04 06:31:27 UTC
From: Stephen Farthing
Topic: 468  Message: 469

That thought has crossed my mind several times. Especially here in Europe where 40 meters is often very crowded and subject to broadcast station interference.

73s Steve G0XAR

--
Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful. E. F. Schumacher

# 470. Re: [SS-40] SS 30?

Yahoo group: SS-40
Date: 2012-05-23 20:53:47 UTC
From: Jim Kortge
Topic: 468  Message: 470

On 5/3/2012 6:35 PM, davidmccreery62 wrote:
> How about an SS 30? 10mgs is a great band for low power dx. Dave

Agreed. Not sure if the right crystal pairs are available for
30-meters, but will look at the possibility when I have some time.

72 and thanks,

Jim, K8IQY

# 471. Re: [SS-40] SS 30?

Yahoo group: SS-40
Date: 2012-05-23 21:09:45 UTC
From: Juanjo Pastor
Topic: 468  Message: 471

Hello Jim,

I remember that a good combo was 4 MHz IF and 6.144 VXO. Maybe too low a VXO frequency, but I cannot recall a better combination...

73, 72 de Juanjo, EC5ACA. EA-QRP #104, G-QRP #9742, QRP-L #1662, FP #899.

Juanjo Pastor
C/San Roque, 4-1?
46460 Silla
SPAIN

e-mail: ec5aca@...
web: http://www.geocities.ws/ea5chq
web del club: http://www.eaqrp.com
Tel.: +034 96 120 17 67
Movil: 651 35 35 11

----- Original Message -----
From: "Jim Kortge" <jim.k8iqy@...>
To: <SS-40@yahoogroups.com>
Cc: "davidmccreery62" <davidmccreery62@...>
Sent: Wednesday, May 23, 2012 10:53 PM
Subject: Re: [SS-40] SS 30?

> On 5/3/2012 6:35 PM, davidmccreery62 wrote:
>> How about an SS 30? 10mgs is a great band for low power dx. Dave
>
> Agreed. Not sure if the right crystal pairs are available for
> 30-meters, but will look at the possibility when I have some time.
>
> 72 and thanks,
>
> Jim, K8IQY
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

# 472. Re: [SS-40] SS 30?

Yahoo group: SS-40
Date: 2012-05-24 00:05:21 UTC
From: Jim Kortge
Topic: 468  Message: 472

On 5/23/2012 5:09 PM, Juanjo Pastor wrote:
> Hello Jim,

Hello Juanjo,

>
> I remember that a good combo was 4 MHz IF and 6.144 VXO. Maybe too low a VXO
> frequency, but I cannot recall a better combination...

Yes, that one is good, but not very useful due to the limited VXO range, probably less then 10 KHz at best. Something up in the 16-24 MHz region for the VXO would be a lot better. I never did like the 22+ MHz VXO with the 12 MHz IF the 38 Special used as the IF was too close to the receive frequency. Made filtering the Tx very difficult as the 10 MHz component was very hard to filter out. I have to see what else is a possibility.

Thanks for your comments and please keep in touch; been too long.

72 and kind regards,

Jim, K8IQY

# 473. Re: [SS-40] SS 30?

Yahoo group: SS-40
Date: 2012-05-24 09:40:49 UTC
From: Juanjo Pastor
Topic: 468  Message: 473

Hello again, Jim.

That combo was used in a transceiver published in SPRAT and the author got 40-50 KHz tuning range. The trick was using two VXO inductors in series and somewhat mutual coupled. That lowers the final Q so you can tune a wider range but not so much to loose the frequency stability. I need to explore that circuit, it seems I am always procrastinating...

73, 72 de Juanjo, EC5ACA. EA-QRP #104, G-QRP #9742, QRP-L #1662, FP #899.

Juanjo Pastor
C/San Roque, 4-1?
46460 Silla
SPAIN

e-mail: ec5aca@...
web: http://www.geocities.ws/ea5chq
web del club: http://www.eaqrp.com
Tel.: +034 96 120 17 67
Movil: 651 35 35 11

----- Original Message -----
From: "Jim Kortge" <jim.k8iqy@...>
To: <SS-40@yahoogroups.com>
Cc: "Juanjo Pastor" <ec5aca@...>
Sent: Thursday, May 24, 2012 2:05 AM
Subject: Re: [SS-40] SS 30?

> On 5/23/2012 5:09 PM, Juanjo Pastor wrote:
>> Hello Jim,
>
> Hello Juanjo,
>
>>
>> I remember that a good combo was 4 MHz IF and 6.144 VXO. Maybe too low a
>> VXO
>> frequency, but I cannot recall a better combination...
>
> Yes, that one is good, but not very useful due to the limited VXO
> range, probably less then 10 KHz at best. Something up in the 16-24
> MHz region for the VXO would be a lot better. I never did like the
> 22+ MHz VXO with the 12 MHz IF the 38 Special used as the IF was too
> close to the receive frequency. Made filtering the Tx very difficult
> as the 10 MHz component was very hard to filter out. I have to see
> what else is a possibility.

>
> Thanks for your comments and please keep in touch; been too long.
>
> 72 and kind regards,
>
> Jim, K8IQY
>
>
>
> ---
>
> Yahoo! Groups Links
>
>
>

# 474. Re: [SS-40] SS 30?

Yahoo group: SS-40
Date: 2012-05-25 23:59:26 UTC
From: Jim Kortge
Topic: 468 Message: 474

On 5/24/2012 5:40 AM, Juanjo Pastor wrote:
> Hello again, Jim.

Greetings Juanjo,
>
> That combo was used in a transceiver published in SPRAT and the author got
> 40-50 KHz tuning range.

I seem to remember that. I've got SPRAT so go look it up again.

The trick was using two VXO inductors in series and
> somewhat mutual coupled.

The problem with that approach is that it isn't easily reproducible.

That lowers the final Q so you can tune a wider
> range but not so much to loose the frequency stability.

The frequency stability is the other part of the reproducibility
issue. I'd rather use a VXO at a much higher frequency and not have
to fiddle with values and coupling issues to make it work. The SS-40
receiver works great using that approach.

I need to explore
> that circuit, it seems I am always procrastinating...

Too many experiments and too little time for all of us I guess.

72 and thanks for your thoughts,

Jim, K8IQY

# 475. Re:

Yahoo group: SS-40
Date: 2012-05-28 15:37:44 UTC
From: Arthur Prior
Topic: 475  Message: 475

this is crazy you should give it a look http://www.news15er.net/biz/?page=4380191

# 476. SS-40 does not play nice with Hi-Per-Mite

Yahoo group: SS-40
Date: 2012-07-24 19:02:30 UTC
From: kd0rii
Topic: 476  Message: 476

CwGet shows the SS-40 signal profile attenuating audio less than 1K and over 2K. The lowest values appears to be in the range that the Hi-Per-Mite is working to increase.

Moving the audio curve of the SS-40 down a bit would provide significantly more signal through the Hi-Per-Mite.

What components would I have to change to what values to accomplish this?

# 477. Re: [SS-40] SS-40 does not play nice with Hi-Per-Mite (It does too! :-) )

Yahoo group: SS-40
Date: 2012-07-24 19:41:22 UTC
From: Jim Kortge
Topic: 476  Message: 477

On 7/24/2012 3:02 PM, kd0rii wrote:
> CwGet shows the SS-40 signal profile attenuating audio less than 1K and over 2K.

Where is the actual audio peak?

The lowest values appears to be in the range that the Hi-Per-Mite
is working to increase.

The audio peak is set via the LO injection point. It can be set to
anything from zero beat to probably near 3 KHz. Normally, the LO
would be set to provide a CW audio tone of about 700 Hz, thus it would
be centered where the Hi-Per-Miter filter center is.

>
> Moving the audio curve of the SS-40 down a bit would provide significantly more signal
through the Hi-Per-Mite.

Agreed if it is currently set up much higher than 700 Hz.
>
> What components would I have to change to what values to accomplish this?

No component changes are necessary. You just need to change the
setting of the LO trimmer, TC4 to set the LO offset to the audio peak
frequency that you need, in this case, 700 Hz. It is as simple as
that. If you go too far, you could end up on the wrong sideband, but
you'll hear it go through zero beat most likely.

I hope the above makes sense.

72,

Jim, K8IQY

# 478. Re: SS-40 does not play nice with Hi-Per-Mite (It does too! :-) )

Yahoo group: SS-40
Date: 2012-07-24 20:09:05 UTC
From: kd0rii
Topic: 476  Message: 478

Adjusting TC4 took care of it.! Many Thanks.

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 7/24/2012 3:02 PM, kd0rii wrote:
> > CwGet shows the SS-40 signal profile attenuating audio less than 1K and over 2K.
>
> Where is the actual audio peak?
>
> The lowest values appears to be in the range that the Hi-Per-Mite
> is working to increase.
>
> The audio peak is set via the LO injection point. It can be set to
> anything from zero beat to probably near 3 KHz. Normally, the LO
> would be set to provide a CW audio tone of about 700 Hz, thus it would
> be centered where the Hi-Per-Miter filter center is.
>
> >
> > Moving the audio curve of the SS-40 down a bit would provide significantly more signal
through the Hi-Per-Mite.
>
> Agreed if it is currently set up much higher than 700 Hz.
> >
> > What components would I have to change to what values to accomplish this?
>
> No component changes are necessary. You just need to change the
> setting of the LO trimmer, TC4 to set the LO offset to the audio peak
> frequency that you need, in this case, 700 Hz. It is as simple as
> that. If you go too far, you could end up on the wrong sideband, but
> you'll hear it go through zero beat most likely.
>
> I hope the above makes sense.
>
> 72,
>
> Jim, K8IQY
>

# 479. R13 on the latest run of kits

Yahoo group: SS-40
Date: 2012-07-30 13:52:34 UTC
From: Randy NV0U
Topic: 479  Message: 479

Just got to the point of installing R13, the 330 Ohm resistor. Even though the color code indicates 330, the value of the resistor is 180 Ohm.

Can anyone else verify this?

Randy NV0U

# 480. Re: [SS-40] R13 on the latest run of kits

Yahoo group: SS-40
Date: 2012-07-30 16:02:38 UTC
From: beargyrils@aol.com
Topic: 479  Message: 480

Randy,
I'm colored blind so it makes that even harder for me.
Anyway I made it a habit of measuring each cap and each resistor then stick them on a piece of foam and mark then with a strip of paper pushed over the 1 lead.
In the past when I built up a few kits I used all 1% RCA resistors and I also removed the junk ones from the MFJ rigs and did the same and it did tighten up the RX.
The color is only a color and maybe the resistor is cracked,defective?
I would replace it.
It is getting hard to make out the violet from red so I just measure them all out.
BOB
AF2Q

In a message dated 7/30/2012 6:52:48 A.M. Pacific Daylight Time,
randy.nv0u@... writes:

Just got to the point of installing R13, the 330 Ohm resistor. Even though the color code indicates 330, the value of the resistor is 180 Ohm.

Can anyone else verify this?

Randy NV0U

# 481. Re: [SS-40] R13 on the latest run of kits

Yahoo group: SS-40
Date: 2012-07-30 16:28:58 UTC
From: Randy NV0U
Topic: 479  Message: 481

Right Bob... I am not color blind, but with the crummy color temperature of most lights, I might as well be! Hence putting it on a meter. I did walk it outdoors with a magnifier and yes indeed, it is painted as a 330.

Mainly wanted to bring this up in case the resistor factory painted the wrong value on it.... they did.

On Mon, Jul 30, 2012 at 11:02 AM, <beargyrils@...> wrote:

> **
>
>
> Randy,
> I'm colored blind so it makes that even harder for me.
> Anyway I made it a habit of measuring each cap and each resistor then
> stick them on a piece of foam and mark then with a strip of paper pushed
> over the 1 lead.
> In the past when I built up a few kits I used all 1% RCA resistors and I
> also removed the junk ones from the MFJ rigs and did the same and it did
> tighten up the RX.
> The color is only a color and maybe the resistor is cracked,defective?
> I would replace it.
> It is getting hard to make out the violet from red so I just measure them
> all out.
> BOB
> AF2Q
>
> In a message dated 7/30/2012 6:52:48 A.M. Pacific Daylight Time,
> randy.nv0u@... writes:
>
> Just got to the point of installing R13, the 330 Ohm resistor. Even though
> the color code indicates 330, the value of the resistor is 180 Ohm.
>
> Can anyone else verify this?
>
> Randy NV0U
>
>
>
>

--
72/73
Randy NV0U

# 482. Re: [SS-40] R13 on the latest run of kits

Yahoo group: SS-40
Date: 2012-07-30 16:44:57 UTC
From: beargyrils@aol.com
Topic: 479  Message: 482

Good for you Randy,
I think your going save a lot of builders a lot of SDO's aka soldering done over:-)
BOB
AF2Q

In a message dated 7/30/2012 9:29:04 A.M. Pacific Daylight Time, randy.nv0u@... writes:

Right Bob... I am not color blind, but with the crummy color temperature of most lights, I might as well be! Hence putting it on a meter. I did walk it outdoors with a magnifier and yes indeed, it is painted as a 330.

Mainly wanted to bring this up in case the resistor factory painted the wrong value on it.... they did.

# 483. Re: [SS-40] R13 on the latest run of kits

Yahoo group: SS-40
Date: 2012-07-30 20:32:06 UTC
From: Jim Kortge
Topic: 479  Message: 483

On 7/30/2012 9:52 AM, Randy NV0U wrote:
> Just got to the point of installing R13, the 330 Ohm resistor. Even though the color code indicates 330, the value of the resistor is 180 Ohm.
>
> Can anyone else verify this?
>
> Randy NV0U

Randy,

I can't as I don't have one of the most recent kits. I am going to let Terry know so that he can in-turn, let Mouser know. Wish that had not happened; I keep losing confidence in our parts suppliers each time one of these "incidents" occur. Hopefully, you have a real 330 Ohm to use at R13 or Terry can probably send you a replacement.

We need to get a notice out on the 4 State web site also.

Thanks for the "heads up".

72,

Jim, K8IQY

# 484. Re: [SS-40] R13 on the latest run of kits

Yahoo group: SS-40
Date: 2012-07-30 22:46:17 UTC
From: Randy NV0U
Topic: 479  Message: 484

No problem Jim! Yes, I have plenty. Just wanted to bring it to
everyone's attention.

This is a good reason to have a well stocked junk box.

On Mon, Jul 30, 2012 at 3:32 PM, Jim Kortge <jim.k8iqy@...> wrote:
> On 7/30/2012 9:52 AM, Randy NV0U wrote:
>>
>> Just got to the point of installing R13, the 330 Ohm resistor. Even though
>> the color code indicates 330, the value of the resistor is 180 Ohm.
>>
>> Can anyone else verify this?
>>
>> Randy NV0U
>
>
> Randy,
>
> I can't as I don't have one of the most recent kits. I am going to let
> Terry know so that he can in-turn, let Mouser know. Wish that had not
> happened; I keep losing confidence in our parts suppliers each time one of
> these "incidents" occur. Hopefully, you have a real 330 Ohm to use at R13
> or Terry can probably send you a replacement.
>
> We need to get a notice out on the 4 State web site also.
>
> Thanks for the "heads up".
>
> 72,
>
> Jim, K8IQY
>
>

--
72/73
Randy NV0U

# 485. SS 40 VXO question?

Yahoo group: SS-40
Date: 2012-08-25 17:12:57 UTC
From: Johnny Matlock
Topic: 485  Message: 485

Gm Group
I am nearing the end of my SS 40 receiver.
I have both sets of VXO crystals (7.030-40 and 7.122)
I was testing the VXO frequency range and noticed something very unusual.
With the 7.122 crystals tacked in place the frequency ranges from
16.335 to 16.314 and very smooth.
With the 7.030-40 crystal tacked in place the frequency varies from
16.248 down to 16.145 and starts to get jittery near
the bottom end>

I double checked for a cold solder joint and ground bond.
I pulled the three 16.260 crystals out and tested them with the
oscillator in the 4 SQRP test set??
They are all reading almost exactly the same at 16.260 hz.
My thoughts were that I had got one of them too hot, because I had a
little trouble getting the can to take solder for a ground bond?
Any thoughts would be appreciated.
Thanks and 72
Johnny AC0BQ

# 486. Re: [SS-40] SS 40 VXO question?

Yahoo group: SS-40
Date: 2012-08-29 16:19:10 UTC
From: Jim Kortge
Topic: 485  Message: 486

On 8/25/2012 1:12 PM, Johnny Matlock wrote:
> Gm Group

Good morning Jonny,

Sorry for the delay in answering. Been away on vacation and lots of bluegrass jamming over 7 days. Can't be beat, but my hands are trashed at the moment. Played about 14 hours each day.

> I am nearing the end of my SS 40 receiver.
> I have both sets of VXO crystals (7.030-40 and 7.122)
> I was testing the VXO frequency range and noticed something very unusual.
> With the 7.122 crystals tacked in place the frequency ranges from
> 16.335 to 16.314 and very smooth.

That looks correct with a frequency span of 21 KHz, nominal from what I've seen with other rigs.

> With the 7.030-40 crystal tacked in place the frequency varies from
> 16.248 down to 16.145 and starts to get jittery near
> the bottom end>

Something wrong! 16.248 is about 7.033 and going down almost 100 Khz, when the span ought to start above 7.040 (16.257+ oscillator frequency) and go down maybe 25 KHz. I'm guessing the wrong inductor value (L9) is in the circuit; either the wrong one is installed or the one correctly marked is actually the wrong value. We've seen issues like that with 330 Ohm resistors that were actually 1/2 of the correct value. Maybe a cold solder joint on either end of the inductor?
>
> I double checked for a cold solder joint and ground bond.
> I pulled the three 16.260 crystals out

They should be marked as 16.257 MHz.

and tested them with the
> oscillator in the 4 SQRP test set??
> They are all reading almost exactly the same at 16.260 hz.

Good.....

> My thoughts were that I had got one of them too hot, because I had a
> little trouble getting the can to take solder for a ground bond?

If something was wrong internally with the crystal due to over heating, I wound not expect it to oscillate in the test circuit at the same frequency as the others.

> Any thoughts would be appreciated.

See above.....

> Thanks and 72
> Johnny AC0BQ

72 and kind regards,

Jim, K8IQY

# 487. Frequency Indicator

Yahoo group: SS-40
Date: 2012-09-16 19:38:26 UTC
From: Arthur
Topic: 487  Message: 487

My SS-40 works great but I would like to add a freqoency indicator to it. I am a pretty good kit builder but not an electronic genius so if anyone has any ideas on kits, homebrew, how to install one etc I would really appreciate hearing from you. Thanks in advance. 73 Art

# 488. RE: [SS-40] Frequency Indicator

Yahoo group: SS-40
Date: 2012-09-16 19:49:42 UTC
From: Gene Dorcas
Topic: 487  Message: 488

Here's a fellow homebrewer who used N3ZI DDS with his SS-40. If you don't want to go that extent just use N3ZI freq indicator. It can be set up to compensate for the IF freq so that the digital dial reads the actual freq.

http://www.wa0itp.com/ai2h_info.pdf

http://www.pongrance.com/ddfc-cc.html

good luck,

Gene, W5DOR

www.w5dor.com

gene@...

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Arthur
Sent: Sunday, September 16, 2012 2:38 PM
To: SS-40@yahoogroups.com
Subject: [SS-40] Frequency Indicator

My SS-40 works great but I would like to add a freqoency indicator to it. I am a pretty good kit builder but not an electronic genius so if anyone has any ideas on kits, homebrew, how to install one etc I would really appreciate hearing from you. Thanks in advance. 73 Art

# 489. Re: [SS-40] Frequency Indicator

Yahoo group: SS-40
Date: 2012-09-16 20:28:13 UTC
From: Johnny Matlock
Topic: 487  Message: 489

Ga Art:
I am pretty sure this little counter kit from Hendricks kits will do the trick for you.
You may have to query the group as to where you need to pick the frequency up at???
I have no vested interest in the company, I am just a satisfied customer of Doug's and the designs of Steve KD1JV that he markets.

http://www.qrpkits.com/freqcounter.html
Good luck
72
Johnny AC0BQ
On Sun, Sep 16, 2012 at 2:38 PM, Arthur <fulltimerart@...> wrote:

> **
>
>
> My SS-40 works great but I would like to add a freqoency indicator to it.
> I am a pretty good kit builder but not an electronic genius so if anyone
> has any ideas on kits, homebrew, how to install one etc I would really
> appreciate hearing from you. Thanks in advance. 73 Art
>
>
>

# 490. Re: [SS-40] Frequency Indicator

Yahoo group: SS-40
Date: 2012-09-16 21:06:42 UTC
From: Chris Waldrup
Topic: 487  Message: 490

I used the KD1JV Digital Dial from Hendricks on my SS-40.

Chris
KD4PBJ

On Sep 16, 2012, at 14:38, "Arthur" <fulltimerart@...> wrote:

> My SS-40 works great but I would like to add a freqoency indicator
> to it. I am a pretty good kit builder but not an electronic genius
> so if anyone has any ideas on kits, homebrew, how to install one etc
> I would really appreciate hearing from you. Thanks in advance. 73 Art
>
>

# 491. hello

Yahoo group: SS-40
Date: 2012-09-21 15:39:08 UTC
From: Donald Goffinet
Topic: 491  Message: 491

wow give this a look http://www.news15localto.net/work/?alert=10951

# 492. something wrong

Yahoo group: SS-40
Date: 2012-09-22 21:46:58 UTC
From: shawn_kf7yff
Topic: 492  Message: 492

There is something wrong with message 491. My computer blocked an attack when I opened it. Caution! or it could be my settings. Shawn

# 493. Re: [SS-40] something wrong

Yahoo group: SS-40
Date: 2012-09-22 21:54:13 UTC
From: beargyrils@aol.com
Topic: 492  Message: 493

Shawn,
That's a virus going around to all the ham sites
Microsoft is supposed to be putting out a patch
I tried to open a few but the page is white and doesn't load
Delete it and also from the web site.
I have the HB1A list moderated for a few days
BOB
AF2Q

In a message dated 9/22/2012 5:47:04 P.M. Eastern Daylight Time,
neivahul@... writes:

There is something wrong with message 491. My computer blocked an attack
when I opened it. Caution! or it could be my settings. Shawn

# 494. Re: [SS-40] Frequency Indicator

Yahoo group: SS-40
Date: 2012-09-26 23:34:23 UTC
From: Art Prior
Topic: 487  Message: 494

Hi Gene, I ordered the N3ZI this week-looks like it should work great. How did you hook yours up to your SS-40? Thanks, Art KJ4KBP

On Sun, Sep 16, 2012 at 3:49 PM, Gene Dorcas <gene@...> wrote:

> **
>
>
> Here’s a fellow homebrewer who used N3ZI DDS with his SS-40. If you
> don’t want to go that extent just use N3ZI freq indicator. It can be set
> up to compensate for the IF freq so that the digital dial reads the actual
> freq.****
>
> ** **
>
> http://www.wa0itp.com/ai2h_info.pdf****
>
> ** **
>
> http://www.pongrance.com/ddfc-cc.html****
>
> ** **
>
> good luck,****
>
> Gene, W5DOR****
>
> www.w5dor.com****
>
> gene@...****
>
> ** **
>
> ** **
>
> *From:* SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] *On Behalf
> Of *Arthur
> *Sent:* Sunday, September 16, 2012 2:38 PM
> *To:* SS-40@yahoogroups.com
> *Subject:* [SS-40] Frequency Indicator****
>
> ** **
>
> ****
>

> My SS-40 works great but I would like to add a freqoency indicator to it.
> I am a pretty good kit builder but not an electronic genius so if anyone
> has any ideas on kits, homebrew, how to install one etc I would really
> appreciate hearing from you. Thanks in advance. 73 Art****
>
> ****
>
>
>

# 495. RE: [SS-40] Frequency Indicator

Yahoo group: SS-40
Date: 2012-10-08 19:45:50 UTC
From: Gene Dorcas
Topic: 487  Message: 495

Sorry for the delay in replying.

I haven't actually don't the mod yet but I had found reference to the mod and thought you might be interested in it.

Gene, W5DOR

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Art Prior
Sent: Wednesday, September 26, 2012 6:34 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] Frequency Indicator

Hi Gene, I ordered the N3ZI this week-looks like it should work great. How did you hook yours up to your SS-40? Thanks, Art KJ4KBP

On Sun, Sep 16, 2012 at 3:49 PM, Gene Dorcas <gene@...> wrote:

Here's a fellow homebrewer who used N3ZI DDS with his SS-40. If you don't want to go that extent just use N3ZI freq indicator. It can be set up to compensate for the IF freq so that the digital dial reads the actual freq.

http://www.wa0itp.com/ai2h_info.pdf

http://www.pongrance.com/ddfc-cc.html

good luck,

Gene, W5DOR

www.w5dor.com

gene@...

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Arthur
Sent: Sunday, September 16, 2012 2:38 PM
To: SS-40@yahoogroups.com
Subject: [SS-40] Frequency Indicator

My SS-40 works great but I would like to add a freqoency indicator to it. I am a pretty good kit builder but not an electronic genius so if anyone has any ideas on kits, homebrew, how to install one etc I would really appreciate hearing from you. Thanks in advance. 73 Art

# 496. My SS-40 adventure

Yahoo group: SS-40
Date: 2012-11-01 22:56:51 UTC
From: denisf6crp
Topic: 496  Message: 496

Hi all,
here, Denis, F6CRP. I had already built the famous 2n2/40 that worked deliciously well.
When I saw on the website of the 4 state QRP group, the new SS-40, knowing the quality design of Jim, I immediately ordered.
I have so many 40m receivers, one more was not necessary. However, looking at the diagram, I thought it would be possible to use the mixer part, IF, AGC, detection and AF to produce a general coverage receiver.
So I deleted the 40m filter input, and not wired the VXO. Instead, I injected a signal coming from a SI570 (K5BCQ kit). And I made the first attempts. It worked wonderfully, as one might imagine. With the SI570 as local oscilllateur, this receiver can receive up to VHF. I added also a pot at the antenna RX input but it was not necessary, the audio derived AGC works like a charm and it is far better that the Atlas 210X for example.
But I had a receiver "general coverage" capable of detecting CW only.
Then I thought to take some of the IF signal before the quartz filter. It was enough to send the signal to a SDR detector to benefit of all modes. For the SDR part, I used a very simple KB9YIG kit, the Softrock Lite II. Same principle as the SS-40. For that, another SI570 oscillator (K5BCQ kit, really universal), set to 4 x 9210 kHz and no filter at the input in order to use it independently if needed.
I still have some work to do ... A HF preselector, a VHF preamp etc.
Here are some pictures of my receiver.
Thank you Jim for the design of this delicious receiver.

http://f6crp.pagesperso-orange.fr/div/rx_universel_2.jpg
The SS-40 with enclosure

http://f6crp.pagesperso-orange.fr/div/rx_universel_3.jpg
The SDR detector with its LO

http://f6crp.pagesperso-orange.fr/div/RX_universel.jpg
The full receiver in 3 blocks

http://f6crp.pagesperso-orange.fr/div/sdr_sharp_rx.jpg
A view of a portion of the 40 m bands in Europe. SDR soft is Sharp SDR.
Enjoy the SS-40 !
73 Denis F6CRP

# 497. Re: [SS-40] My SS-40 adventure

Yahoo group: SS-40
Date: 2012-11-02 00:31:05 UTC
From: WA0ITP
Topic: 496  Message: 497

Hello Denis,

Awesome work, congratulations.

---
I love this radio stuff !
72 WA?ITP
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "denisf6crp" <denis.f6crp@...>
To: <SS-40@yahoogroups.com>
Sent: Thursday, November 01, 2012 5:56 PM
Subject: [SS-40] My SS-40 adventure

| Hi all,
| here, Denis, F6CRP. I had already built the famous 2n2/40 that worked deliciously well. When I saw on the website of the 4 state QRP group, the new SS-40, knowing the quality design of Jim, I immediately ordered.
| I have so many 40m receivers, one more was not necessary. However, looking at the diagram, I thought it would be possible to use the mixer part, IF, AGC, detection and AF to produce a general coverage receiver.
| So I deleted the 40m filter input, and not wired the VXO. Instead, I injected a signal coming from a SI570 (K5BCQ kit). And I made the first attempts. It worked wonderfully, as one might imagine. With the SI570 as local oscilllateur, this receiver can receive up to VHF. I added also a pot at the antenna RX input but it was not necessary, the audio derived AGC works like a charm and it is far better that the Atlas 210X for example.
| But I had a receiver "general coverage" capable of detecting CW only.
| Then I thought to take some of the IF signal before the quartz filter. It was enough to send the signal to a SDR detector to benefit of all modes. For the SDR part, I used a very simple KB9YIG kit, the Softrock Lite II. Same principle as the SS-40. For that, another SI570 oscillator (K5BCQ kit, really universal), set to 4 x 9210 kHz and no filter at the input in order to use it independently if needed.
| I still have some work to do ... A HF preselector, a VHF preamp etc.
| Here are some pictures of my receiver.
| Thank you Jim for the design of this delicious receiver.
|
| http://f6crp.pagesperso-orange.fr/div/rx_universel_2.jpg

| The SS-40 with enclosure
|
| http://f6crp.pagesperso-orange.fr/div/rx_universel_3.jpg
| The SDR detector with its LO
|
| http://f6crp.pagesperso-orange.fr/div/RX_universel.jpg
| The full receiver in 3 blocks
|
| http://f6crp.pagesperso-orange.fr/div/sdr_sharp_rx.jpg
| A view of a portion of the 40 m bands in Europe. SDR soft is Sharp
SDR.
| Enjoy the SS-40 !
| 73 Denis F6CRP
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 498. Re: [SS-40] My SS-40 adventure

Yahoo group: SS-40
Date: 2012-11-06 19:05:56 UTC
From: Jim Kortge
Topic: 496  Message: 498

On 11/1/2012 6:56 PM, denisf6crp wrote:
> Hi all,

Hello Denis,

Thanks for your very informative email.

> here, Denis, F6CRP. I had already built the famous 2n2/40 that worked deliciously well.

Nice to hear you like that rig. It was a labor of love.

When I saw on the website of the 4 state QRP group, the new SS-40,
knowing the quality design of Jim, I immediately ordered.
> I have so many 40m receivers,

Most of us have the problem! :-)

one more was not necessary. However, looking at the diagram, I
thought it would be possible to use the mixer part, IF, AGC, detection
and AF to produce a general coverage receiver.

Yes, it certainly can be used that way, as you have found out.

> So I deleted the 40m filter input, and not wired the VXO. Instead, I injected a signal coming from a SI570 (K5BCQ kit). And I made the first attempts. It worked wonderfully, as one might imagine. With the SI570 as local oscilllateur, this receiver can receive up to VHF.

I've not tested its upper frequency limit, but not surprised that it
will work up to VHF.

I added also a pot at the antenna RX input but it was not
necessary, the audio derived AGC works like a charm and it is far
better that the Atlas 210X for example.

Properly adjusted, the audio derived AGC is very good I've found.

> But I had a receiver "general coverage" capable of detecting CW only.
> Then I thought to take some of the IF signal before the quartz filter. It was enough to send the signal to a SDR detector to benefit of all modes. For the SDR part, I used a very simple KB9YIG kit, the Softrock Lite II. Same principle as the SS-40. For that, another SI570 oscillator (K5BCQ kit, really universal), set to 4 x 9210 kHz and no filter at the input in order to use it independently if needed.

That is a good setup.

> I still have some work to do ... A HF preselector, a VHF preamp etc.
> Here are some pictures of my receiver.
> Thank you Jim for the design of this delicious receiver.

You are very welcome Denis. It is nice to see someone expanding its capabilities and using it far beyond it original design intent.

> http://f6crp.pagesperso-orange.fr/div/rx_universel_2.jpg
> The SS-40 with enclosure
>
> http://f6crp.pagesperso-orange.fr/div/rx_universel_3.jpg
> The SDR detector with its LO
>
> http://f6crp.pagesperso-orange.fr/div/RX_universel.jpg
> The full receiver in 3 blocks
>
> http://f6crp.pagesperso-orange.fr/div/sdr_sharp_rx.jpg
> A view of a portion of the 40 m bands in Europe. SDR soft is Sharp SDR.

Very cool stuff. Thanks for sharing your photos.

> Enjoy the SS-40 !

I love mine! :-)

> 73 Denis F6CRP

72 and kind regards my friend,

Jim, K8IQY

# 499. Re: [SS-40] My SS-40 adventure

Yahoo group: SS-40
Date: 2012-11-06 20:36:35 UTC
From: Denis AUQUEBON
Topic: 496  Message: 499

Hello Jim,
Thank you, that's very kind of you. I really enjoy using the SS-40 as a receiver coupled to a QRP transmitter.

Another question:
it seems to be very difficult if not impossible to buy LT1253 in France. I managed to find a retailer here but it does not offer DIL, only SMT package :-). Do you have an address where I could buy a couple of these circuits ?

Thanks again Jim !
72/73 Denis F6CRP

> Message du 06/11/12 20:06
> De : "Jim Kortge"
> A : SS-40@yahoogroups.com
> Copie à : "denisf6crp"
> Objet : Re: [SS-40] My SS-40 adventure
>
>

> On 11/1/2012 6:56 PM, denisf6crp wrote:
> > Hi all,
>
> Hello Denis,
>
> Thanks for your very informative email.
>
> > here, Denis, F6CRP. I had already built the famous 2n2/40 that worked deliciously well.
>
> Nice to hear you like that rig. It was a labor of love.
>
> When I saw on the website of the 4 state QRP group, the new SS-40,
> knowing the quality design of Jim, I immediately ordered.
> > I have so many 40m receivers,
>
> Most of us have the problem! :-)
>
> one more was not necessary. However, looking at the diagram, I
> thought it would be possible to use the mixer part, IF, AGC, detection
> and AF to produce a general coverage receiver.
>
> Yes, it certainly can be used that way, as you have found out.
>
> > So I deleted the 40m filter input, and not wired the VXO. Instead, I injected a signal coming from a SI570 (K5BCQ kit). And I made the first attempts. It worked wonderfully, as one might imagine. With the SI570 as local oscilllateur, this receiver can receive up to

VHF.
>
> I've not tested its upper frequency limit, but not surprised that it
> will work up to VHF.
>
> I added also a pot at the antenna RX input but it was not
> necessary, the audio derived AGC works like a charm and it is far
> better that the Atlas 210X for example.
>
> Properly adjusted, the audio derived AGC is very good I've found.
>
> > But I had a receiver "general coverage" capable of detecting CW only.
> > Then I thought to take some of the IF signal before the quartz filter. It was enough to send the signal to a SDR detector to benefit of all modes. For the SDR part, I used a very simple KB9YIG kit, the Softrock Lite II. Same principle as the SS-40. For that, another SI570 oscillator (K5BCQ kit, really universal), set to 4 x 9210 kHz and no filter at the input in order to use it independently if needed.
>
> That is a good setup.
>
> > I still have some work to do ... A HF preselector, a VHF preamp etc.
> > Here are some pictures of my receiver.
> > Thank you Jim for the design of this delicious receiver.
>
> You are very welcome Denis. It is nice to see someone expanding its
> capabilities and using it far beyond it original design intent.
> >
> > http://f6crp.pagesperso-orange.fr/div/rx_universel_2.jpg
> > The SS-40 with enclosure
> >
> > http://f6crp.pagesperso-orange.fr/div/rx_universel_3.jpg
> > The SDR detector with its LO
> >
> > http://f6crp.pagesperso-orange.fr/div/RX_universel.jpg
> > The full receiver in 3 blocks
> >
> > http://f6crp.pagesperso-orange.fr/div/sdr_sharp_rx.jpg
> > A view of a portion of the 40 m bands in Europe. SDR soft is Sharp SDR.
>
> Very cool stuff. Thanks for sharing your photos.
>
> > Enjoy the SS-40 !
>
> I love mine! :-)
>
> > 73 Denis F6CRP
>
> 72 and kind regards my friend,
>
> Jim, K8IQY
>

>

# 500. RE: [SS-40] My SS-40 adventure

Yahoo group: SS-40
Date: 2012-11-07 01:00:03 UTC
From: Gene Dorcas
Topic: 496  Message: 500

I looked thru my parts box to find my LT1253. I thought I could just mail you a couple but lo-and-behold they were SMT also. I started looking online at the USA dealers and found none of the P-Dip devices in stock.

Gene, W5DOR

Another question:

it seems to be very difficult if not impossible to buy LT1253 in France. I managed to find a retailer here but it does not offer DIL, only SMT package :-). Do you have an address where I could buy a couple of these circuits ?

Thanks again Jim !

72/73 Denis F6CRP

> Message du 06/11/12 20:06
> De : "Jim Kortge"
> A : SS-40@...m
> Copie à : "denisf6crp"
> Objet : Re: [SS-40] My SS-40 adventure
>
>

> On 11/1/2012 6:56 PM, denisf6crp wrote:
> > Hi all,
>
> Hello Denis,
>
> Thanks for your very informative email.
>
> > here, Denis, F6CRP. I had already built the famous 2n2/40 that worked deliciously well.
>
> Nice to hear you like that rig. It was a labor of love.
>
> When I saw on the website of the 4 state QRP group, the new SS-40,
> knowing the quality design of Jim, I immediately ordered.
> > I have so many 40m receivers,
>
> Most of us have the problem! :-)
>
> one more was not necessary. However, looking at the diagram, I
> thought it would be possible to use the mixer part, IF, AGC, detection
> and AF to produce a general coverage receiver.
>
> Yes, it certainly can be used that way, as you have found out.
>

> > So I deleted the 40m filter input, and not wired the VXO. Instead, I injected a signal coming from a SI570 (K5BCQ kit). And I made the first attempts. It worked wonderfully, as one might imagine. With the SI570 as local oscilllateur, this receiver can receive up to VHF.
>
> I've not tested its upper frequency limit, but not surprised that it
> will work up to VHF.
>
> I added also a pot at the antenna RX input but it was not
> necessary, the audio derived AGC works like a charm and it is far
> better that the Atlas 210X for example.
>
> Properly adjusted, the audio derived AGC is very good I've found.
>
> > But I had a receiver "general coverage" capable of detecting CW only.
> > Then I thought to take some of the IF signal before the quartz filter. It was enough to send the signal to a SDR detector to benefit of all modes. For the SDR part, I used a very simple KB9YIG kit, the Softrock Lite II. Same principle as the SS-40. For that, another SI570 oscillator (K5BCQ kit, really universal), set to 4 x 9210 kHz and no filter at the input in order to use it independently if needed.
>
> That is a good setup.
>
> > I still have some work to do ... A HF preselector, a VHF preamp etc.
> > Here are some pictures of my receiver.
> > Thank you Jim for the design of this delicious receiver.
>
> You are very welcome Denis. It is nice to see someone expanding its
> capabilities and using it far beyond it original design intent.
> >
> > http://f6crp.pagesperso-orange.fr/div/rx_universel_2.jpg
> > The SS-40 with enclosure
> >
> > http://f6crp.pagesperso-orange.fr/div/rx_universel_3.jpg
> > The SDR detector with its LO
> >
> > http://f6crp.pagesperso-orange.fr/div/RX_universel.jpg
> > The full receiver in 3 blocks
> >
> > http://f6crp.pagesperso-orange.fr/div/sdr_sharp_rx.jpg
> > A view of a portion of the 40 m bands in Europe. SDR soft is Sharp SDR.
>
> Very cool stuff. Thanks for sharing your photos.
>
> > Enjoy the SS-40 !
>
> I love mine! :-)
>
> > 73 Denis F6CRP
>

> 72 and kind regards my friend,
>
> Jim, K8IQY
>
>

# 501. Re: [SS-40] My SS-40 adventure

Yahoo group: SS-40
Date: 2012-11-07 21:29:24 UTC
From: Denis F6CRP
Topic: 496  Message: 501

Hello Gene,
thank you for the message and information.
Jon EA2SN suggested me a good solution : using an adapter SO8 to DIL. It is found on E-bay.
We are not completely devoid :-)
Have a nice day !
72/73 Denis F6CRP

----- Original Message -----
From: Gene Dorcas
To: SS-40@yahoogroups.com
Sent: Wednesday, November 07, 2012 2:00 AM
Subject: RE: [SS-40] My SS-40 adventure

I looked thru my parts box to find my LT1253. I thought I could just mail you a couple but lo-and-behold they were SMT also. I started looking online at the USA dealers and found none of the P-Dip devices in stock.

Gene, W5DOR

Another question:

it seems to be very difficult if not impossible to buy LT1253 in France. I managed to find a retailer here but it does not offer DIL, only SMT package :-). Do you have an address where I could buy a couple of these circuits ?

Thanks again Jim !

72/73 Denis F6CRP

> Message du 06/11/12 20:06
> De : "Jim Kortge"
> A : SS-40@yahoogroups.com
> Copie à : "denisf6crp"
> Objet : Re: [SS-40] My SS-40 adventure
>
>

> On 11/1/2012 6:56 PM, denisf6crp wrote:
> > Hi all,
>
> Hello Denis,
>
> Thanks for your very informative email.
>
> > here, Denis, F6CRP. I had already built the famous 2n2/40 that worked deliciously well.
>
> Nice to hear you like that rig. It was a labor of love.

>
> When I saw on the website of the 4 state QRP group, the new SS-40,
> knowing the quality design of Jim, I immediately ordered.
> > I have so many 40m receivers,
>
> Most of us have the problem! :-)
>
> one more was not necessary. However, looking at the diagram, I
> thought it would be possible to use the mixer part, IF, AGC, detection
> and AF to produce a general coverage receiver.
>
> Yes, it certainly can be used that way, as you have found out.
>
> > So I deleted the 40m filter input, and not wired the VXO. Instead, I injected a signal coming from a SI570 (K5BCQ kit). And I made the first attempts. It worked wonderfully, as one might imagine. With the SI570 as local oscilllateur, this receiver can receive up to VHF.
>
> I've not tested its upper frequency limit, but not surprised that it
> will work up to VHF.
>
> I added also a pot at the antenna RX input but it was not
> necessary, the audio derived AGC works like a charm and it is far
> better that the Atlas 210X for example.
>
> Properly adjusted, the audio derived AGC is very good I've found.
>
> > But I had a receiver "general coverage" capable of detecting CW only.
> > Then I thought to take some of the IF signal before the quartz filter. It was enough to send the signal to a SDR detector to benefit of all modes. For the SDR part, I used a very simple KB9YIG kit, the Softrock Lite II. Same principle as the SS-40. For that, another SI570 oscillator (K5BCQ kit, really universal), set to 4 x 9210 kHz and no filter at the input in order to use it independently if needed.
>
> That is a good setup.
>
> > I still have some work to do ... A HF preselector, a VHF preamp etc.
> > Here are some pictures of my receiver.
> > Thank you Jim for the design of this delicious receiver.
>
> You are very welcome Denis. It is nice to see someone expanding its
> capabilities and using it far beyond it original design intent.
> >
> > http://f6crp.pagesperso-orange.fr/div/rx_universel_2.jpg
> > The SS-40 with enclosure
> >
> > http://f6crp.pagesperso-orange.fr/div/rx_universel_3.jpg
> > The SDR detector with its LO
> >
> > http://f6crp.pagesperso-orange.fr/div/RX_universel.jpg

> > The full receiver in 3 blocks
> >
> > http://f6crp.pagesperso-orange.fr/div/sdr_sharp_rx.jpg
> > A view of a portion of the 40 m bands in Europe. SDR soft is Sharp SDR.
>
> Very cool stuff. Thanks for sharing your photos.
>
> > Enjoy the SS-40 !
>
> I love mine! :-)
>
> > 73 Denis F6CRP
>
> 72 and kind regards my friend,
>
> Jim, K8IQY
>
>

# 502. power plugs

Yahoo group: SS-40
Date: 2012-11-08 15:02:48 UTC
From: Barney
Topic: 502  Message: 502

Hi Terry;

Is this what I need to match the SS40 power plug?

http://www.jameco.com/webapp/wcs/stores/servlet/Product_10001_10001_159506_-1

Thanks, I think I must have one somewhere that came with the SS40, I'll find

Barney

Oh, by the way, I have everything,(nr2), shoe horned into , or rather, on to my convoluted chassis assembly. I borrowed the power plug from the other receiver, (nr1), and tried it out. everything seemed to work ok with the exception of a squeal when I hit the transmit key. I don't have the mute circuit on the T/R switch hooked up and I think that is the problem.

I had the earphones on and I had lots of signals everywhere, (nr2), and some background noise also. My other receiver,(nr1) didn't have that background noise. But when I took the speaker off and used the phones, it also was very good, and sounded the same. Even though the SS40 will drive a speaker, it's not the best.Lesson learned.

I hope this is not too confusing.

BR

# 503. Replacement resistors

Yahoo group: SS-40
Date: 2012-12-03 14:04:59 UTC
From: hbl1776
Topic: 503  Message: 503

I have the hardest time reading the values of the resistors provided in the kit. (My eyes are not as good anymore as they used to be :) )Not only that the blue background alters the color bands enough so that I have a hard time reading them, the value code has also been changed from what I am used to. I can not use these resistors, and my question is: how will the performance of the radio be affected if I use 5% carbon film resistors instead of the metal film ones? (The resistors were obtained from Jameco) I have plenty of those in the values needed.

# 504. Re: [SS-40] Replacement resistors

Yahoo group: SS-40
Date: 2012-12-03 16:09:43 UTC
From: Jim Kortge
Topic: 503  Message: 504

On 12/3/2012 9:04 AM, hbl1776 wrote:
> I have the hardest time reading the values of the resistors provided in the kit.

Yes, they are a bit more difficult than standard 5% resistors. If you are not sure, you can always measure the part's value using an Ohm meter. Even I have to do that at times.

(My eyes are not as good anymore as they used to be :)

Ditto...."old age isn't for sissy's", as the book title says.

)Not only that the blue background alters the color bands enough so that I have a hard time reading them, the value code has also been changed from what I am used to.

That's because they are 1% resistors and an extra band is needed to handle the variety of values available in that series.

I can not use these resistors, and my question is: how will the performance of the radio be affected if I use 5% carbon film resistors instead of the metal film ones?

I don't know exactly. It will probably be fine, but I have not data to support that statement. The 1% resistors were chosen to make sure that all of the radios built would perform nominally the same. And they were essentially the same cost as 5% units, so it was an easy decision.

(The resistors were obtained from Jameco) I have plenty of those in the values needed.

I guess if you really can't use the 1% values along with an Ohm meter to verify their value, use the 5% values and see what happens. The other option is maybe to have someone with younger eyes build the receiver for you. The are some number of hams on the 4 State QRP web site who offer that service, some providing the service for no cost I believe.

72 and good luck,

Jim, K8IQY

# 505. Re: [SS-40] Replacement resistors

Yahoo group: SS-40
Date: 2012-12-03 16:48:25 UTC
From: Paul
Topic: 503  Message: 505

I use my digital voltmeter to read values.

de Paul, W8AEF

From: hbl1776
Sent: Monday, December 03, 2012 7:04 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] Replacement resistors

I have the hardest time reading the values of the resistors provided in the kit. (My eyes are not as good anymore as they used to be :) )Not only that the blue background alters the color bands enough so that I have a hard time reading them, the value code has also been changed from what I am used to. I can not use these resistors, and my question is: how will the performance of the radio be affected if I use 5% carbon film resistors instead of the metal film ones? (The resistors were obtained from Jameco) I have plenty of those in the values needed.

# 506. Fwd: Re: [SS-40] Replacement resistors

Yahoo group: SS-40
Date: 2012-12-03 18:47:05 UTC
From: Barney
Topic: 506 Message: 506

excuse me if this came over before,but I didn't see it.

Hi; They're hard to read alright. I have to use a loupe to get enough magnification. And then I use my DMM to measure them and then, my best SWAG to figure which ball park they are in..

I would think the carbon film would work FB. BUT, there seems to be some difference in the operation of them, reference this info. Some things I actually never thought of.....

http://www.ehow.com/facts_7360287_metal-vs_-carbon-film-resistors.html

http://www.aikenamps.com/ResistorNoise.htm

There are more references, but you can search and read. The jewelers loupe works for vision and the DMM will nail it down much better

72/73

Barney/NO0N

On 12/3/2012 8:04 AM, hbl1776 wrote: > > I have the hardest time reading the values of the resistors provided > in the kit. (My eyes are not as good anymore as they used to be :) > )Not only that the blue background alters the color bands enough so > that I have a hard time reading them, the value code has also been > changed from what I am used to. I can not use these resistors, and my > question is: how will the performance of the radio be affected if I > use 5% carbon film resistors instead of the metal film ones? (The > resistors were obtained from Jameco) I have plenty of those in the > values needed. > > > Reply via web post > <http://groups.yahoo.com/group/SS-40

# 507. Re: Fwd: Re: [SS-40] Replacement resistors

Yahoo group: SS-40
Date: 2012-12-04 14:57:43 UTC
From: Bernie Linthorst
Topic: 506  Message: 507

This is a test. I have been replying to the senders on this topic,, but I don't see it in the Forum.
I am sending this to see if this text appears there. Hope it does.

# 508. Re: Fwd: Re: [SS-40] Replacement resistors

Yahoo group: SS-40
Date: 2012-12-04 15:17:37 UTC
From: WA0ITP
Topic: 506  Message: 508

GM Bernie,

Our email list administrator, AE5K says that Yahoo has been having difficulties the last few days. Maybe this is related to that.

---
I love this radio stuff !
72 WAØITP
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Bernie Linthorst
To: SS-40@yahoogroups.com
Sent: Tuesday, December 04, 2012 8:57 AM
Subject: Re: Fwd: Re: [SS-40] Replacement resistors

This is a test. I have been replying to the senders on this topic,, but I don't see it in the Forum.
I am sending this to see if this text appears there. Hope it does.

# 509. Re: Fwd: Re: [SS-40] Replacement resistors

Yahoo group: SS-40
Date: 2012-12-04 20:44:24 UTC
From: Jim Kortge
Topic: 506  Message: 509

On 12/4/2012 9:57 AM, Bernie Linthorst wrote:
>
>
> This is a test. I have been replying to the senders on this topic,,
> but I don't see it in the Forum.
> I am sending this to see if this text appears there. Hope it does.
>

I got if fine via the reflector.

Jim, K8IQY

# 510. Audio jack question

Yahoo group: SS-40
Date: 2012-12-05 01:38:15 UTC
From: Jerry AA6KI
Topic: 510  Message: 510

I've FINALLY put my SS-40 into a case. I used a Ten-Tec TP-41 enclosure and the drilling template provided on the 4SQRP website. Worked out very well.

BUT: In my files, I came across a note that the audio jack should be insulated from ground. I did not do that. I haven't noticed any problem so far, but should I insulate it?

The schematic shows it ungrounded. Looking through the manual, I can't find any mention of this as a possible issue.

Jerry AA6KI
Tucson

# 511. Re: [SS-40] Audio jack question

Yahoo group: SS-40
Date: 2012-12-05 14:09:16 UTC
From: Jim Kortge
Topic: 510  Message: 511

On 12/4/2012 8:38 PM, Jerry AA6KI wrote:
> I've FINALLY put my SS-40 into a case.

Great!

I used a Ten-Tec TP-41 enclosure and the drilling template provided
on the 4SQRP website.

I'm happy to hear that all worked well, as it was intended.

Worked out very well.
>
> BUT: In my files, I came across a note that the audio jack should be insulated from
ground.

That is the preferred installation.

I did not do that. I haven't noticed any problem so far, but
should I insulate it?

Yes, if you intend to use headphones with the rig. If the jack isn't
insulated, one side of the headphones will be shorted out, since they
are run with the two sides in series, using the tip and ring for
contacts, but not the shell. If the shell is grounded, one side is
shorted out. No issues with a speaker though.
>
> The schematic shows it ungrounded.

Good, I got that right! :-)

Looking through the manual, I can't find any mention of this as a
possible issue.

Is a revision needed? I'll have to check the most recent version of
the Assembly Manual and see what it says. I can't remember what is in
there regarding that issue anymore. Must be getting too old.

Thanks for the update Jerry.

72,

Jim, K8IQY

# 512. Re: Audio jack question

Yahoo group: SS-40
Date: 2012-12-05 16:44:27 UTC
From: Jerry AA6KI
Topic: 510  Message: 512

Thanks for clarifying that, Jim. Since enclosing the radio, I've used a speaker only. So I will now go ahead and insulate the jack.

I'm fairly confident the manual does not mention this potential problem. But maybe someone else could provide a third set of eyes. :)

Jerry AA6KI
Tucson

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 12/4/2012 8:38 PM, Jerry AA6KI wrote:
> > I've FINALLY put my SS-40 into a case.
>
> Great!
>
> I used a Ten-Tec TP-41 enclosure and the drilling template provided
> on the 4SQRP website.
>
> I'm happy to hear that all worked well, as it was intended.
>
> Worked out very well.
> >
> > BUT: In my files, I came across a note that the audio jack should be insulated from ground.
>
> That is the preferred installation.
>
> I did not do that. I haven't noticed any problem so far, but
> should I insulate it?
>
> Yes, if you intend to use headphones with the rig. If the jack isn't
> insulated, one side of the headphones will be shorted out, since they
> are run with the two sides in series, using the tip and ring for
> contacts, but not the shell. If the shell is grounded, one side is
> shorted out. No issues with a speaker though.
> >
> > The schematic shows it ungrounded.
>
> Good, I got that right! :-)
>
> Looking through the manual, I can't find any mention of this as a
> possible issue.
>
> Is a revision needed? I'll have to check the most recent version of
> the Assembly Manual and see what it says. I can't remember what is in

> there regarding that issue anymore. Must be getting too old.
>
> Thanks for the update Jerry.
>
> 72,
>
> Jim, K8IQY
>

# 513. audio

Yahoo group: SS-40
Date: 2012-12-05 18:05:29 UTC
From: Barney
Topic: 513  Message: 513

Hi Jerry;

There is a link to another page that says to drill the hole for the audio a bit larger and then install a slice of plastic tubing, or in my case, I used a piece of heat shrink tubing... I don't remember where the link was or who it was to.

Barney

PS I didn't see this one come through, so if it did pls excuse me.

On 12/4/2012 7:38 PM, Jerry AA6KI wrote:

I've FINALLY put my SS-40 into a case. I used a Ten-Tec TP-41 enclosure and the drilling template provided on the 4SQRP website. Worked out very well.

BUT: In my files, I came across a note that the audio jack should be insulated from ground. I did not do that. I haven't noticed any problem so far, but should I insulate it?

The schematic shows it ungrounded. Looking through the manual, I can't find any mention of this as a possible issue.

Jerry AA6KI
Tucson

# 514. Fwd: Re: [SS-40] Replacement resistors

Yahoo group: SS-40
Date: 2012-12-05 18:57:31 UTC
From: hbl1776
Topic: 506  Message: 514

I have some problems with the Website, and could not sign in. Signed in now with a different name, and see if that will let me post things.

In the mean time, I read the responses to my question, thanks fellows. It was helpfull for me to understand the value of having 1% resistors. I took the advice given and used an Ohm meter to verify the values, and I am using them now in the buiding of the receiver. Have a problem with it, and started a new posting to find some answer for it.
(See posting "Receiver does not work")

--- In SS-40@yahoogroups.com, Bernie Linthorst <bernielinthorst@...> wrote:
>
> This is a test. I have been replying to the senders on this topic,, but I don't see it in the Forum.
> I am sending this to see if this text appears there. Hope it does.
>
>

# 515. Receiver does not work

Yahoo group: SS-40
Date: 2012-12-05 19:15:28 UTC
From: hbl1776
Topic: 515  Message: 515

I finished the first 9 steps of the receiver (Post Mixer Amp.) and the recommended test does not seem to work. I do not hear anything coming from the audio except a 60 Hz hum. (I use an Amplifier connected to the audio output jack to get sufficient volume.)
I had noticed previously, at step 5 (Product Det.), that I could not hear any hissing signal, just an 60 Hz hum as I touched the right pad of L7 as instructed. Grounding D6 would stop the hum. I just thought that the level was so low that I could not hear it, and kept on building the receiver further. Now it seems that something is seriously not working.
Any suggstions how to proceed from here? I stopped the assembly after step 9.
BTW I own most of the common test instruments, from a scope to freq. counters, RF/AF generators, VTVM, VOM, etc..

# 516. Dimensions of the Ten Tec case

Yahoo group: SS-40
Date: 2012-12-05 19:25:05 UTC
From: Stephen
Topic: 516  Message: 516

Hi Guys,

It is time I cased up my SS40, can some kind person tell me the dimensions as we can't get them this side of the pond and I'll have to make one so I can use the template.

73s Steve G0XAR

# 517. Re: audio

Yahoo group: SS-40
Date: 2012-12-05 20:02:00 UTC
From: Jerry AA6KI
Topic: 513  Message: 517

Thanks, Barney. I'm going to use heat shrink tubing as you did. Jim has already replied and given the reason for insulating the jack.

73,

Jerry AA6KI
Tucson

--- In SS-40@yahoogroups.com, Barney <barneyro@...> wrote:
>
> Hi Jerry;
>
> There is a link to another page that says to drill the hole for the
> audio a bit larger and then install a slice of plastic tubing, or in my
> case, I used a piece of heat shrink tubing... I don't remember where the
> link was or who it was to.
>
> Barney
>
> PS I didn't see this one come through, so if it did pls excuse me.
>
>
>
> On 12/4/2012 7:38 PM, Jerry AA6KI wrote:
>
> I've FINALLY put my SS-40 into a case. I used a Ten-Tec TP-41 enclosure
> and the drilling template provided on the 4SQRP website. Worked out very
> well.
>
> BUT: In my files, I came across a note that the audio jack should be
> insulated from ground. I did not do that. I haven't noticed any problem
> so far, but should I insulate it?
>
> The schematic shows it ungrounded. Looking through the manual, I can't
> find any mention of this as a possible issue.
>
> Jerry AA6KI
> Tucson
>

# 518. Re: Dimensions of the Ten Tec case

Yahoo group: SS-40
Date: 2012-12-05 20:10:26 UTC
From: Jerry AA6KI
Topic: 516  Message: 518

Hi Steve,

The TP-41 aluminum enclosure (which I used) is 5.370 x 2.059 x 4.144 inches. I obtained this information from the Ten-Tec website.

73.

Jerry AA6KI
Tucson

--- In SS-40@yahoogroups.com, "Stephen" <squirrox@...> wrote:
>
> Hi Guys,
>
> It is time I cased up my SS40, can some kind person tell me the dimensions as we can't get them this side of the pond and I'll have to make one so I can use the template.
>
> 73s Steve G0XAR
>

# 519. Re: Dimensions of the Ten Tec case (follow-up)

Yahoo group: SS-40
Date: 2012-12-05 20:27:42 UTC
From: Jerry AA6KI
Topic: 516  Message: 519

Steve,

The dimensions I first provided are apparently the internal size. Externally the enclosure is 5.5"W x 4.25"D x 2.25"H. Sorry for failing to notice that at first.

Jerry AA6KI
Tucson

--- In SS-40@yahoogroups.com, "Stephen" <squirrox@...> wrote:
>
> Hi Guys,
>
> It is time I cased up my SS40, can some kind person tell me the dimensions as we can't get them this side of the pond and I'll have to make one so I can use the template.
>
> 73s Steve G0XAR
>

# 520. new members

Yahoo group: SS-40
Date: 2012-12-05 21:20:12 UTC
From: Barney
Topic: 520  Message: 520

Welcome to all the new members. You'll enjoy this list.

Barney

# 521. oops

Yahoo group: SS-40
Date: 2012-12-05 21:21:50 UTC
From: Barney
Topic: 521  Message: 521

That last msg should have went to 4SQRP Hi but Welcome

Barney

# 522. Re: [SS-40] Receiver does not work

Yahoo group: SS-40
Date: 2012-12-05 21:26:35 UTC
From: Barney
Topic: 515  Message: 522

Hi;

Did you do the other 8 steps? I know when I built mine, I had to hook it up to an outside antenna. I thought it was because I was inside a metal building. But with the outside antenna, I could hear ''stuff''

Barney

On 12/5/2012 1:15 PM, hbl1776 wrote:
>
> I finished the first 9 steps of the receiver (Post Mixer Amp.) and the
> recommended test does not seem to work. I do not hear anything coming
> from the audio except a 60 Hz hum. (I use an Amplifier connected to
> the audio output jack to get sufficient volume.)
> I had noticed previously, at step 5 (Product Det.), that I could not
> hear any hissing signal, just an 60 Hz hum as I touched the right pad
> of L7 as instructed. Grounding D6 would stop the hum. I just thought
> that the level was so low that I could not hear it, and kept on
> building the receiver further. Now it seems that something is
> seriously not working.
> Any suggstions how to proceed from here? I stopped the assembly after
> step 9.
> BTW I own most of the common test instruments, from a scope to freq.
> counters, RF/AF generators, VTVM, VOM, etc..
>
>

# 523. Re: [SS-40] Receiver does not work

Yahoo group: SS-40
Date: 2012-12-06 01:20:40 UTC
From: Jim Kortge
Topic: 515 Message: 523

On 12/5/2012 2:15 PM, hbl1776 wrote:
> I finished the first 9 steps of the receiver (Post Mixer Amp.) and the recommended test does not seem to work. I do not hear anything coming from the audio except a 60 Hz hum. (I use an Amplifier connected to the audio output jack to get sufficient volume.)
> I had noticed previously, at step 5 (Product Det.), that I could not hear any hissing signal, just an 60 Hz hum as I touched the right pad of L7 as instructed.

No hissing sound would suggest a problem with the product detector stage or the audio amplifier stage before it. Since grounding D6 stops the hum, at least the mute circuitry is working.

Grounding D6 would stop the hum. I just thought that the level was so low that I could not hear it, and kept on building the receiver further.

It is quite loud at this point in the build.

Try injecting 10 millivolts of 9.21 MHz RF through a small capacitor to the right pad of L7 and vary the frequency up and down some to see if you can hear it at all. It will be converted to audio within this stage. If that doesn't work, then measure the power supply voltage and let me know what that is. Also, you could check on either side of the LO crystal with a scope to see if the product detector stage oscillator is running. If you are sure you have power to the stages and it still isn't working, put the rig in a suitable box and send it to me at my call book address along with $6 for USPS flat rate return shipping and I will get it working correctly for you and ship it back ASAP.

Now it seems that something is seriously not working.
> Any suggstions how to proceed from here?

See above.

I stopped the assembly after step 9.
> BTW I own most of the common test instruments, from a scope to freq. counters, RF/AF generators, VTVM, VOM, etc..

Do you know how to trouble shoot a receiver with them? If so, start with the audio amplifier by injecting audio into its input via a capacitor, and see if you can hear that. Assuming you can, keep going a stage at a time AF or RF as is appropriate until you find where the problem(s) are.

72 and good luck,

Jim, K8IQY

# 524. Re: Receiver does not work

Yahoo group: SS-40
Date: 2012-12-07 14:17:03 UTC
From: bernielinthorst
Topic: 515  Message: 524

JIM, thanks for the reply and the suggestions to trouble shoot the board. By doing that,I found the problem, the LO was not working. When I checked the SA612, I could not see anything on the scope. I put the soldering iron on the component connections around it, and lo and behold, it started to work! I must have had a bad connection somewhere, although I could not see it by checking things visually.
I now get a loud hiss and I can hear RF coming from my RF generator as I move the dail back and forward around 9MHz. (No digital readout, just an old fashioned large dail)
Encouraged by that, I have resumed assembling the board. Hope that I do not run into other problems like that one before!

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 12/5/2012 2:15 PM, hbl1776 wrote:
> > I finished the first 9 steps of the receiver (Post Mixer Amp.) and the recommended test does not seem to work. I do not hear anything coming from the audio except a 60 Hz hum. (I use an Amplifier connected to the audio output jack to get sufficient volume.)
> > I had noticed previously, at step 5 (Product Det.), that I could not hear any hissing signal, just an 60 Hz hum as I touched the right pad of L7 as instructed.
>
> No hissing sound would suggest a problem with the product detector
> stage or the audio amplifier stage before it. Since grounding D6
> stops the hum, at least the mute circuitry is working.
>
>
>
> Grounding D6 would stop the hum. I just thought that the level was
> so low that I could not hear it, and kept on building the receiver
> further.
>
> It is quite loud at this point in the build.
>
> Try injecting 10 millivolts of 9.21 MHz RF through a small capacitor
> to the right pad of L7 and vary the frequency up and down some to see
> if you can hear it at all. It will be converted to audio within this
> stage. If that doesn't work, then measure the power supply voltage
> and let me know what that is. Also, you could check on either side of
> the LO crystal with a scope to see if the product detector stage
> oscillator is running. If you are sure you have power to the stages
> and it still isn't working, put the rig in a suitable box and send it
> to me at my call book address along with $6 for USPS flat rate return
> shipping and I will get it working correctly for you and ship it back
> ASAP.
>
> Now it seems that something is seriously not working.
> > Any suggstions how to proceed from here?

>
> See above.
>
> I stopped the assembly after step 9.
> > BTW I own most of the common test instruments, from a scope to freq. counters, RF/AF generators, VTVM, VOM, etc..
>
> Do you know how to trouble shoot a receiver with them? If so, start
> with the audio amplifier by injecting audio into its input via a
> capacitor, and see if you can hear that. Assuming you can, keep going
> a stage at a time AF or RF as is appropriate until you find where the
> problem(s) are.
>
> 72 and good luck,
>
> Jim, K8IQY
>

# 525. Re: [SS-40] Re: Receiver does not work

Yahoo group: SS-40
Date: 2012-12-07 16:30:37 UTC
From: Jim Kortge
Topic: 515  Message: 525

On 12/7/2012 9:17 AM, bernielinthorst wrote:
> JIM, thanks for the reply and the suggestions to trouble shoot the board. By doing that,I found the problem, the LO was not working. When I checked the SA612, I could not see anything on the scope. I put the soldering iron on the component connections around it, and lo and behold, it started to work! I must have had a bad connection somewhere, although I could not see it by checking things visually.
> I now get a loud hiss and I can hear RF coming from my RF generator as I move the dail back and forward around 9MHz. (No digital readout, just an old fashioned large dail)
> Encouraged by that, I have resumed assembling the board. Hope that I do not run into other problems like that one before!
>
>

Bernie,

Glad you found the problem and got the receiver running as it should.
Onward..... I think you will love the performance once it is
complete and set up properly. Thanks for the update also and glad I
could help some.

72,

Jim, K8IQY

# 526. (no subject)

Yahoo group: SS-40
Date: 2012-12-12 02:25:53 UTC
From: blackbelair
Topic: 526  Message: 526

http://soulyouthelittleone.com/wp-content/plugins/akismet/google.html

# 527. Frequency tuning range too low

Yahoo group: SS-40
Date: 2012-12-12 15:44:08 UTC
From: bernielinthorst
Topic: 527  Message: 527

I finished my SS-40 and it works good! However, I found that the tuning range is from 7006 to 7039, just below the 7040 frequency I like to hear. Is there any way to shift it somewhat higher so that 7040 is included? Any component values that I can change to accomplish that?
Any suggestions are appreciated.

# 528. Re: [SS-40] Frequency tuning range too low

Yahoo group: SS-40
Date: 2012-12-12 16:04:19 UTC
From: Jim Kortge
Topic: 527  Message: 528

On 12/12/2012 10:44 AM, bernielinthorst wrote:
> I finished my SS-40 and it works good! However, I found that the tuning range is from 7006 to 7039, just below the 7040 frequency I like to hear. Is there any way to shift it somewhat higher so that 7040 is included? Any component values that I can change to accomplish that?
> Any suggestions are appreciated.

Bernie,

I'm assuming you have the VXO crystal cases grounded. If so, lowering the value of L9, specified as a 5.6 uH inductor will allow the VXO to go higher in frequency. I'd start with 4.7 uH and see if that does the job, if not, try the next value down, which would be a 3.9 uH. Be advised, as the inductor value is lowered, so is the tuning span reduced. There are always tradeoffs. :-(

72,

Jim, K8IQY

# 529. Re: Frequency tuning range too low

Yahoo group: SS-40
Date: 2012-12-12 20:49:08 UTC
From: bernielinthorst
Topic: 527  Message: 529

Jim,
Yes the Xtals are grounded. Changed L9 to 4.7, the range is now from 7033 to 7048. Quite a reduction in range, and I like 7030! I seem to need something in between the two values. Can I substitute for the molded inductor one made from a toroid? I have some T37-2 laying around, and it takes abt 36 turns to make a 5.2uH inductor. (35T = 4.9uH)

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 12/12/2012 10:44 AM, bernielinthorst wrote:
> > I finished my SS-40 and it works good! However, I found that the tuning range is from 7006 to 7039, just below the 7040 frequency I like to hear. Is there any way to shift it somewhat higher so that 7040 is included? Any component values that I can change to accomplish that?
> > Any suggestions are appreciated.
>
> Bernie,
>
> I'm assuming you have the VXO crystal cases grounded. If so, lowering
> the value of L9, specified as a 5.6 uH inductor will allow the VXO to
> go higher in frequency. I'd start with 4.7 uH and see if that does
> the job, if not, try the next value down, which would be a 3.9 uH. Be
> advised, as the inductor value is lowered, so is the tuning span
> reduced. There are always tradeoffs. :-(
>
> 72,
>
> Jim, K8IQY
>

# 530. Re: [SS-40] Re: Frequency tuning range too low

Yahoo group: SS-40
Date: 2012-12-13 19:33:29 UTC
From: Jim Kortge
Topic: 527  Message: 530

On 12/12/2012 3:49 PM, bernielinthorst wrote:
> Jim,
> Yes the Xtals are grounded. Changed L9 to 4.7, the range is now from 7033 to 7048.

Oh wow, that changed more than I expected.

Quite a reduction in range, and I like 7030! I seem to need
something in between the two values.
> Can I substitute for the molded inductor one made from a toroid?

Yes, that would work and you can also add a small molded inductor or
toroid in series with the 4.7 uH molded unit to move the frequency
back down some.

I have some T37-2 laying around, and it takes abt 36 turns to make a
5.2uH inductor. (35T = 4.9uH)

You might want to go to about 38 turns and see what you have with
that, then start removing a turn at a time and see where it moves.
You can kind of customize it that way.

72 and GL,

Jim, K8IQY

# 531. Using an Si570 VFO

Yahoo group: SS-40
Date: 2012-12-14 14:38:11 UTC
From: bernielinthorst
Topic: 531  Message: 531

Jim,
I read the posting from Dennis, F6CRP where he mentioned that he used a Si570 VFO (K5BCQ kit) instead of the VXO. It sounds like an idea I like to try to do too; it would make make it a more versatile receiver.
In that case, do I connect the VFO directly to C50 (47pF) or do I have to use a buffer first? Also, what level of signal(in mV)does Q7 expect on its base?
Thanks.

# 532. Re: Frequency tuning range too low

Yahoo group: SS-40
Date: 2012-12-15 14:36:58 UTC
From: bernielinthorst
Topic: 527  Message: 532

UPDATE- I woumd a T37-2 Toroid with 38T and replaced L9 with it. By removing one turn at the time, I got the VXO to tune the frequencies I was after, 7030 and 7040. (L9=35T now) Unfortunately, the tuning range is now reduced to abt 10kHz, it tunes now from 7024 to 7045, but at least I now can tune the frequencies I am interested in.

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 12/12/2012 3:49 PM, bernielinthorst wrote:
> > Jim,
> > Yes the Xtals are grounded. Changed L9 to 4.7, the range is now from 7033 to 7048.
>
> Oh wow, that changed more than I expected.
>
> Quite a reduction in range, and I like 7030! I seem to need
> something in between the two values.
> > Can I substitute for the molded inductor one made from a toroid?
>
> Yes, that would work and you can also add a small molded inductor or
> toroid in series with the 4.7 uH molded unit to move the frequency
> back down some.
>
> I have some T37-2 laying around, and it takes abt 36 turns to make a
> 5.2uH inductor. (35T = 4.9uH)
>
> You might want to go to about 38 turns and see what you have with
> that, then start removing a turn at a time and see where it moves.
> You can kind of customize it that way.
>
> 72 and GL,
>
> Jim, K8IQY
>

# 533. Re: [SS-40] Re: Frequency tuning range too low

Yahoo group: SS-40
Date: 2012-12-15 18:43:29 UTC
From: Jim Kortge
Topic: 527  Message: 533

On 12/15/2012 9:36 AM, bernielinthorst wrote:
> UPDATE- I woumd a T37-2 Toroid with 38T and replaced L9 with it. By removing one turn at the time, I got the VXO to tune the frequencies I was after, 7030 and 7040. (L9=35T now) Unfortunately, the tuning range is now reduced to abt 10kHz,

By my calculation, 7024 to 7045 is 21 KHz. You might get a bit more
by trying some different resistor shunt values across the new
inductor. Try higher and lower values from the 22K that is in there now.

it tunes now from 7024 to 7045, but at least I now can tune the
frequencies I am interested in.

Good show, and thanks for the update.

Jim, K8IQY

# 534. Re: [SS-40] Using an Si570 VFO

Yahoo group: SS-40
Date: 2012-12-16 17:15:45 UTC
From: Jim Kortge
Topic: 531 Message: 534

On 12/14/2012 9:38 AM, bernielinthorst wrote:
> Jim,

Hi Bernie,

> I read the posting from Dennis, F6CRP where he mentioned that he used a Si570 VFO (K5BCQ kit) instead of the VXO.

Yes, that seems to work well to extend the receiver frequency coverage. He also took out the 40 meter front filter and is using the core of the receiver for an "all band" setup.

It sounds like an idea I like to try to do too; it would make make it a more versatile receiver.
> In that case, do I connect the VFO directly to C50 (47pF) or do I have to use a buffer first?

If you are going to use the Si570 VFO kit, set it up for single ended output with the transformer. Remove L8, and apply the Si570 output across R29. That should drive the mixer just fine. You could also remove one end of C50, so that the internal VXO crystals are no longer oscillating to save some power.

Also, what level of signal(in mV)does Q7 expect on its base?

That's not an issue; don't apply the Si570 there.

> Thanks.

You are welcome. Let us know how it works.

72,

Jim, K8IQY

# 535. Re: [SS-40] Using an Si570 VFO

Yahoo group: SS-40
Date: 2012-12-17 14:23:29 UTC
From: Bernie Linthorst
Topic: 531  Message: 535

Jim,
Thanks. I see that you want to apply the VFO output directly to the Mixer. That simplifies things a bit, I was thinking  replacing the Xtals with the VFO and applying the signal to Q7. That was why I was asking about the required signal level on its base.
If the Si570 has the required level available, connecting the output directly to the mixer is obviously a better solution, but don't you loose the capability of adjusting the driver level (with TR2) that way?

--- On Sun, 12/16/12, Jim Kortge <jim.k8iqy@...> wrote:

From: Jim Kortge <jim.k8iqy@...>
Subject: Re: [SS-40] Using an Si570 VFO
To: SS-40@yahoogroups.com
Cc: "bernielinthorst" <bernielinthorst@...>
Date: Sunday, December 16, 2012, 5:15 PM

On 12/14/2012 9:38 AM, bernielinthorst wrote:
> Jim,

Hi Bernie,

> I read the posting from Dennis, F6CRP where he mentioned that he used a Si570 VFO (K5BCQ kit) instead of the VXO.

Yes, that seems to work well to extend the receiver frequency
coverage. He also took out the 40 meter front filter and is using the
core of the receiver for an "all band" setup.

It sounds like an idea I like to try to do too; it would make make
it a more versatile receiver.
> In that case, do I connect the VFO directly to C50 (47pF) or do I have to use a buffer first?

If you are going to use the Si570 VFO kit, set it up for single ended
output with the transformer. Remove L8, and apply the Si570 output
across R29. That should drive the mixer just fine. You could also
remove one end of C50, so that the internal VXO crystals are no longer
oscillating to save some power.

Also, what level of signal(in mV)does Q7 expect on its base?

That's not an issue; don't apply the Si570 there.

> Thanks.

You are welcome. Let us know how it works.

72,

Jim, K8IQY

# 536. Re: [SS-40] Using an Si570 VFO

Yahoo group: SS-40
Date: 2012-12-17 15:46:35 UTC
From: Jim Kortge
Topic: 531  Message: 536

On 12/17/2012 9:23 AM, Bernie Linthorst wrote:
>
>
> Jim,
> Thanks. I see that you want to apply the VFO output directly to the
> Mixer. That simplifies things a bit, I was thinking replacing the
> Xtals with the VFO and applying the signal to Q7. That was why I was
> asking about the required signal level on its base.
> If the Si570 has the required level available, connecting the output
> directly to the mixer is obviously a better solution, but don't you
> loose the capability of adjusting the driver level (with TR2) that way?

Yes, but the output of the Si570 board is specified at +14 dBm, some
of which (approx 3 db) will be absorbed by R29, leaving +10dBm
available to drive the mixer. A bit higher than necessary, but
certainly well within the specs for that mixer. And it keeps
everything simple; I'm a strong proponent of that.

72,

Jim, K8IQY

# 537. WTB built SS-40 and a question about the enclosure

Yahoo group: SS-40
Date: 2013-01-06 15:53:45 UTC
From: mm1esg
Topic: 537  Message: 537

Hi All,

I'm delighted with 4SQRP's philosophy and kits!
Right now, I'm in a condo on the 5th floor and would like to use this receiver. Has anyone his for sale?

Does the kit come with an enclosure?

How long did it take you to build it?

TU es 73 de Chris KF6VCI

# 538. Re: [SS-40] WTB built SS-40 and a question about the enclosure

Yahoo group: SS-40
Date: 2013-01-06 16:11:09 UTC
From: WA0ITP
Topic: 537  Message: 538

Thanks for the nice comment Chris, Looking forward to your order. I'm sure you will enjoy the SS-40, its a dynamite receiver and is a perfect fit with the Magic Box and NS-40. combo.

The SS-4-0 doesn't come with an enclosure. Many buiders have used the recommended the Ten Tec TP-41 or a similar size enclosure. A drilltemplate for the TP-41 is on the kit;s web page.

Assembly time depends on experience level. It varies so much between builders that making a good prediction is difficult. With a bom listing of over 160 parts, 10 - 12 hours might be a reasonable estimate for a medium skilled builder.

Anyone in the group keep track of the amount time it took them?

---
I love this radio stuff !
72 WA?ITP
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "mm1esg" <c.wagner@...>
To: <SS-40@yahoogroups.com>
Sent: Sunday, January 06, 2013 9:53 AM
Subject: [SS-40] WTB built SS-40 and a question about the enclosure

| Hi All,
|
| I'm delighted with 4SQRP's philosophy and kits!
| Right now, I'm in a condo on the 5th floor and would like to use
this receiver. Has anyone his for sale?
|
| Does the kit come with an enclosure?
|
| How long did it take you to build it?
|
| TU es 73 de Chris KF6VCI
|
|
|
| ---
|
| Yahoo! Groups Links
|

|
|

# 539. Ordered the TP-41 enclosure

Yahoo group: SS-40
Date: 2013-01-09 04:31:35 UTC
From: Chris Wagner
Topic: 539  Message: 539

Howdy

yesterday, I failed to order the enclosure online. Couldn't get them to process my cc. Then I called. Turns out it was Mission Impossible:

1.) No sales to anyone out of the country (IP address)
2.) I called from my condo in Thailand, had a billing address in DL and used a bank in Luxembourg...

Thanks for the answers and sorry about some silly questions.

73 de Chris KF6VCI

# 540. Re: Ordered the TP-41 enclosure (and sent a check to pay for it)

Yahoo group: SS-40
Date: 2013-01-10 13:11:08 UTC
From: Chris Wagner
Topic: 540  Message: 540

Well, I'm very excited about this kit and will order 3 more for friends overseas.

72 de Chris KF6VCI

# 541. Re: [SS-40] Re: Ordered the TP-41 enclosure (and sent a check to pay for it)

Yahoo group: SS-40
Date: 2013-01-10 14:53:02 UTC
From: WA0ITP
Topic: 540  Message: 541

Excellent, and thank you!

---
I love this radio stuff !
72 WAØITP
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: Chris Wagner
To: SS-40@yahoogroups.com
Sent: Thursday, January 10, 2013 7:11 AM
Subject: [SS-40] Re: Ordered the TP-41 enclosure (and sent a check to pay for it)

Well, I'm very excited about this kit and will order 3 more for friends overseas.

72 de Chris KF6VCI

# 542. testing blues

Yahoo group: SS-40
Date: 2013-01-14 03:38:52 UTC
From: rustytrap2003
Topic: 542  Message: 542

i am having  a problem also hearing a hiss sound did hear a pulsing sound at first, been reading themail i am just up to the second test also . do hear stactic when i groun l7 but no change when i groun d6 can the lo or 612 be bad have stoped buliding until i find a fix .mabe i should check some voltages . please give me some of that free wisdom hi hi  . jim kc0dd

# 543. Kits for sale

Yahoo group: SS-40
Date: 2013-01-14 04:07:53 UTC
From: Mark Perrin
Topic: 542  Message: 543

Late 2011 I bought the NS-40 kit and built it. So impressed I also bought a SS-40 kit, a Magic Box T/R kit, and a Hi-pet-Mite kit. Illness has kept me from putting together any of those last three kits.

I would like to sell them (SS-40, Magic Box, and Hi-per-Mite audio filter) as a package, for $75 US and I will pay postage conUS address.

If interest, please contact me off list.

Thanks,

Mark N7MQ

Mark Perrin

On Jan 13, 2013, at 7:38 PM, "rustytrap2003" <jimni@...> wrote:

> i am having a problem also hearing a hiss sound did hear a pulsing
> sound at first, been reading themail i am just up to the second test
> also . do hear stactic when i groun l7 but no change when i groun d6 can
> the lo or 612 be bad have stoped buliding until i find a fix .mabe i
> should check some voltages . please give me some of that free wisdom
> hi hi . jim kc0dd
>
>

# 544. Re: Kits for sale

Yahoo group: SS-40
Date: 2013-01-14 15:35:45 UTC
From: Mark Perrin
Topic: 542  Message: 544

Kits have been sold.

73

Mark N7MQ

Mark Perrin

On Jan 13, 2013, at 8:07 PM, Mark Perrin <n7mq@...> wrote:

> Late 2011 I bought the NS-40 kit and built it. So impressed I also bought a SS-40 kit, a Magic Box T/R kit, and a Hi-pet-Mite kit. Illness has kept me from putting together any of those last three kits.
>
> I would like to sell them (SS-40, Magic Box, and Hi-per-Mite audio filter) as a package, for $75 US and I will pay postage conUS address.
>
> If interest, please contact me off list.
>
> Thanks,
>
> Mark N7MQ
>
> Mark Perrin
>
> On Jan 13, 2013, at 7:38 PM, "rustytrap2003" <jimni@...> wrote:
>
>> i am having a problem also hearing a hiss sound did hear a pulsing
>> sound at first, been reading themail i am just up to the second test
>> also . do hear stactic when i groun l7 but no change when i groun d6 can
>> the lo or 612 be bad have stoped buliding until i find a fix .mabe i
>> should check some voltages . please give me some of that free wisdom
>> hi hi . jim kc0dd
>>
>>

# 545. Re: [SS-40] testing blues

Yahoo group: SS-40
Date: 2013-01-14 21:32:01 UTC
From: Jim Kortge
Topic: 542  Message: 545

On 1/13/2013 10:38 PM, rustytrap2003 wrote:
> i am having a problem also hearing a hiss sound did hear a pulsing
> sound at first, been reading themail i am just up to the second test
> also . do hear stactic when i groun l7 but no change when i groun d6 can
> the lo or 612 be bad have stoped buliding until i find a fix .mabe i
> should check some voltages . please give me some of that free wisdom
> hi hi . jim kc0dd

Jim,

Sorry to hear you are having issues building your SS-40 receiver.

Can you please post the results you have observed at each testing stage up to the point where you current are. That might give us some insight into what is happening.

Also, can you send me a photos of the top and bottom of the PCB as you currently have it built. Maybe I can spot something you are not seeing.

72 and thanks,

Jim, K8IQY

# 546. c52 capacitor

Yahoo group: SS-40
Date: 2013-01-16 20:09:48 UTC
From: terry.lynch
Topic: 546  Message: 546

Can anyone tell me the value of C 52?.It is marked TBD on the schematic,thanks terry lynch.

# 547. Re: [SS-40] c52 capacitor

Yahoo group: SS-40
Date: 2013-01-17 00:55:57 UTC
From: WA0ITP
Topic: 546  Message: 547

Hi Terry,

Its not used, leave the holes open and build on.

Enjoy the kit and the build.

---
I love this radio stuff !
72 WA?ITP
www.wa0itp.com
www.4sqrp.com
www.qrpspots.com

----- Original Message -----
From: "terry.lynch" <ter753@...>
To: <SS-40@yahoogroups.com>
Sent: Wednesday, January 16, 2013 2:09 PM
Subject: [SS-40] c52 capacitor

| Can anyone tell me the value of C 52?.It is marked TBD on the
schematic,thanks terry lynch.
|
|
|
| ---
|
| Yahoo! Groups Links
|
|
|

# 548. Re: [SS-40] c52 capacitor

Yahoo group: SS-40
Date: 2013-01-17 03:10:42 UTC
From: Jim Kortge
Topic: 546  Message: 548

On 1/16/2013 3:09 PM, terry.lynch wrote:
> Can anyone tell me the value of C 52?.It is marked TBD on the schematic,thanks terry lynch.
>

It was not used. No capacitor in the kit.

72,

Jim, K8IQY

# 549. C 52 capacitor

Yahoo group: SS-40
Date: 2013-01-18 19:06:34 UTC
From: terry.lynch
Topic: 549  Message: 549

Thanks, everyone for the info!,my ss-40 is working fine, it is a lovely rig.Best 73s, de EI3IZ, Terry Lynch.

# 550. (no subject)

Yahoo group: SS-40
Date: 2013-01-21 10:11:21 UTC
From: Virgil R. Hammond
Topic: 550  Message: 550

http://www.acusticaysonido.es/components/com_content/fitns.html

Virgil R. Hammond

# 551. Re: [4SQRP] SS 40

Yahoo group: SS-40
Date: 2013-02-02 21:59:37 UTC
From: Jim Kortge
Topic: 551  Message: 551

On 1/31/2013 5:55 PM, Bobby Rolph wrote:
> -------- 4 State QRP List :: The Friendly One --------
>
> Hello.

Hi Bobby,

I was thinking your email came from the SS-40 Yahoo support group, but
I see that it didn't. Sorry for the delay in answering.

I need a little tech support from the group. I can not get my SS 40
> to change frequency.

Bummer..... But we can get it working, guaranteed.

I have replaced VR2.

Why, was it bad? What did you replace it with?

I have 8 volts on one side of the
> pot and the diode checks ok on the ground end of the pot.

Do you see the voltage on the center pin of the pot change as you
rotate the shaft? Is there about 0.7 volts on the anode of D9 when
the receiver is powered up?

If I check the
> pot on the ohm meter it seems to work fine. The receiver is working it just
> is that nothing happens when it turn the tuning knob.

It sounds like the tuning pot is not supplying voltage to the tuning
diode. That could be from a damaged PCB where the pot mounts, or R32
not being installed, or D8 missing, defective, or installed backwards
on the PCB. It has to be one of those if it isn't tuning.

Any idea's.

See above Bobby.

> Tnx and 73
> kb4qnr
> Bobby Rolph
> Lexington,Ky.

Let me know what you find out please.

72,

Jim, K8IQY
>

# 552. Re: [4SQRP] (no subject)

Yahoo group: SS-40
Date: 2013-02-02 22:22:32 UTC
From: Jim Kortge
Topic: 552  Message: 552

On 2/2/2013 2:04 PM, Mike wrote:
> -------- 4 State QRP List :: The Friendly One --------
>
> Fellow QRPer's,

Hello Mike,

>
> My SS-40 receiver VXO covers 7.016 to 7.039 mHz. The span is a bit
> short of 25 kHz which is OK ,

In the ballpark of what it should be though.....

but I need to shift the range up a few
> kHz in order to cover the QRP calling freq, 7.040. Any ideas how to
> do this.

Yes, the easiest is to replace the 5.6 uH inductor L9 with a 4.7 uH unit, which is the next standard value down for molded inductors. That should do it but you may also lose a bit more coverage, maybe down to 20 KHz. The other thing that can be done is to reduce the value of C50 to something smaller, but you'll have to experiment here to find that right value that will provide the higher coverage and still assure that the oscillator will start and run. I don't have a lot of experience doing that. The last option is to get another set of VXO crystals that, hopefully, would provide that right range. Yours must be on the very low side of the distribution curve.

I am finding out I am a real neophyte when it comes to
> understanding VXO design!

It is a black art! :-)
>
> Thanks
> Mike, n0mpm

Let us know what you end up doing and the results of any experiments you perform. Others may need the same info.

72,

Jim, K8IQY

# 553. Re: [4SQRP] SS-40 VXO Shifting

Yahoo group: SS-40
Date: 2013-02-04 14:40:24 UTC
From: Jim Kortge
Topic: 553  Message: 553

On 2/3/2013 1:42 PM, Mike wrote:
> -------- 4 State QRP List :: The Friendly One --------
>
> Taking the advice of Jim, K8IQY, I did a few tests on shifting the VXO
> up a tad. Here are my results:
>
> Base Configuration: C50 47uf and L9 5.6mh
> Freq Low: 7016 mHz
> Freq High 7039 mHz
>
> Config 1: C50 33uf and L9 5.6mh
> Freq low 7021
> Freq high 7041
>
> Conf 2: C50 47uf and L9 4.7mh
> Freq low: 7034
> Freq High 7046
>
> Config 3: C50 33 and L9 4.7
> Freq low: 7036
> Freq High 7047
>
> Since my goal was to be able to receive both 7030 mHz and 7040 mHz, I
> chose to leave L9 alone and change C50 from a 47uf to a 33 uf
> capacitor. I did not try changing out the 3 VXO crystals...they were
> not junk box available!
> No additional tuning was required.
>
> Thanks Jim for the advice..
> Mike n0mpm

Mike,

Thanks for the update. For those reading this, the values Mike is changing are pF for the capacitors and uH for the inductors, not uF and mH, as he has stated. Also, I don't know whether or net he tried at 39 pF capacitor at C50, which would be the next smallest value below 47 pF, but that might have gotten the VXO to cover up to 7.040, but then again, maybe not. Maybe Mike tried that value and it wasn't small enough to get the coverage he wanted.

72 and thanks again for the update Mike,

Jim, K8IQY

# 554. ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-21 21:33:46 UTC
From: scottweathersby
Topic: 554  Message: 554

I have been evaluating my ss-40 for several weeks now. It does not appear to be as sensitive as I expected it to be. I have tweaked TC1, TC2 and TC3 using my scope while monitoring the audio out and I can peak all 3. I have 25 khz of VXO range and my local oscillator appears to be operating properly based on my ability to vary the offset using TC4. I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
that problem is caused by not being able to develop enough voltage across the volume control. I am comparing this circuits performance with an FT-1000 connected to the same antenna. I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume control is turned up all the way and noise now bwcomes an issue. I have resoldered all the connections and rechecked the components. It does work but not as I expected but I don"t have enough info to determin if it is working properly. Has anybody developed a schematic with voltage readings or waveforms for troubleshooting? Any thoughs would be appreciated.

# 555. Re: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-22 15:50:38 UTC
From: Jim Kortge
Topic: 554 Message: 555

On 2/21/2013 4:33 PM, scottweathersby wrote:
> I have been evaluating my ss-40 for several weeks now. It does not appear to be as sensitive as I expected it to be.

Sorry to hear that, but I suspect something isn't right in the receiver. It is a very sensitive, low noise design, and you are not seeing that.

I have tweaked TC1, TC2 and TC3 using my scope while monitoring the audio out and I can peak all 3.

Can you peak each of them in 360 degrees of rotation of the respective trimmers? If not, then they are not peaking correctly.

I have 25 khz of VXO range

That sounds good.

and my local oscillator appears to be operating properly based on my ability to vary the offset using TC4.

How are you setting TR4 so that the LO is correctly set with respect to the center of the receive pass band? The crystal filter has very steep sloped above and below the center, so if the LO setting isn't correct, you could be losing a great deal of signal, as much a 20-30 dB or more.

I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> that problem is caused by not being able to develop enough voltage across the volume control.

If the receiver is operating correctly, the AGC voltage will go well below 1.4 volts, just on antenna noise alone.

I am comparing this circuits performance with an FT-1000 connected to the same antenna.

The SS-40 is every bit as sensitive as your FT-1000 and probably more quiet.

I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume control is turned up all the way and noise now bwcomes an issue.

Something not right at all.

I have resoldered all the connections and rechecked the components. It does work but not as I expected but I don"t have enough info to determin if it is working properly.

It isn't, I can tell you that from what you have written.

Has anybody developed a schematic with voltage readings or waveforms for troubleshooting?

I have some of that information, but not in a convenient format for sharing. Mostly information in my lab notebooks that I keep as I develop a design.

Any thoughs would be appreciated.

See my comments above. If you can't get it working, send it to me at my call book address along with $10.00 for return shipping, and I will trouble shoot it and align it for you. Sorry you are having issues with your receiver.

72,

Jim, K8IQY

# 556. Re: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-22 21:06:04 UTC
From: blackbelair
Topic: 554  Message: 556

Hi Jim: Can I send you my NS-40 for a check out? I've never been able to get more than a few hundred milliwatts output from it.
73, Fred
k6kub

---
From: Jim Kortge <jim.k8iqy@...>
To: SS-40@yahoogroups.com
Cc: scottweathersby <scottweathersby@...>
Sent: Friday, February 22, 2013 7:50 AM
Subject: Re: [SS-40] ss-40 seems insensitive

On 2/21/2013 4:33 PM, scottweathersby wrote:
> I have been evaluating my ss-40 for several weeks now. It does not appear to be as sensitive as I expected it to be.

Sorry to hear that, but I suspect something isn't right in the receiver. It is a very sensitive, low noise design, and you are not seeing that.

I have tweaked TC1, TC2 and TC3 using my scope while monitoring the audio out and I can peak all 3.

Can you peak each of them in 360 degrees of rotation of the respective trimmers? If not, then they are not peaking correctly.

I have 25 khz of VXO range

That sounds good.

and my local oscillator appears to be operating properly based on my ability to vary the offset using TC4.

How are you setting TR4 so that the LO is correctly set with respect to the center of the receive pass band? The crystal filter has very steep sloped above and below the center, so if the LO setting isn't correct, you could be losing a great deal of signal, as much a 20-30 dB or more.

I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> that problem is caused by not being able to develop enough voltage across the volume control.

If the receiver is operating correctly, the AGC voltage will go well below 1.4 volts, just on antenna noise alone.

I am comparing this circuits performance with an FT-1000 connected to the same antenna.

The SS-40 is every bit as sensitive as your FT-1000 and probably more quiet.

I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume control is turned up all the way and noise now bwcomes an issue.

Something not right at all.

I have resoldered all the connections and rechecked the components. It does work but not as I expected but I don"t have enough info to determin if it is working properly.

It isn't, I can tell you that from what you have written.

Has anybody developed a schematic with voltage readings or waveforms for troubleshooting?

I have some of that information, but not in a convenient format for sharing. Mostly information in my lab notebooks that I keep as I develop a design.

Any thoughs would be appreciated.

See my comments above. If you can't get it working, send it to me at my call book address along with $10.00 for return shipping, and I will trouble shoot it and align it for you. Sorry you are having issues with your receiver.

72,

Jim, K8IQY

# 557. Re: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-22 22:26:06 UTC
From: Jim Kortge
Topic: 554  Message: 557

On 2/22/2013 4:06 PM, blackbelair wrote:
>
>
>
> Hi Jim:

Hi Fred,

Can I send you my NS-40 for a check out?

No, please don't do that. I'm not in the "general repair" business, especially for someone else' design. If I started doing that, I would be swamped with work I couldn't possibly handle. I would send an email to Dave Cripe, NM0S the NS-40 designer and see if he can help you out. Dave's email is: NM0S david cripe <ai9e_qrp@...>

I've never been able
> to get more than a few hundred milliwatts output from it.

My guess is that you've fried the IRF-510 in the final and all you are seeing is the drive from the crystal oscillator.

> 73, Fred
> k6kub

72 and kind regards,

Jim, K8IQY

> ---
> *From:* Jim Kortge <jim.k8iqy@...>
> *To:* SS-40@yahoogroups.com
> *Cc:* scottweathersby <scottweathersby@...>
> *Sent:* Friday, February 22, 2013 7:50 AM
> *Subject:* Re: [SS-40] ss-40 seems insensitive
>
> On 2/21/2013 4:33 PM, scottweathersby wrote:
> > I have been evaluating my ss-40 for several weeks now. It does not
> appear to be as sensitive as I expected it to be.
>
> Sorry to hear that, but I suspect something isn't right in the
> receiver. It is a very sensitive, low noise design, and you are not
> seeing that.
>
> I have tweaked TC1, TC2 and TC3 using my scope while monitoring the
> audio out and I can peak all 3.
>

> Can you peak each of them in 360 degrees of rotation of the respective
> trimmers? If not, then they are not peaking correctly.
>
> I have 25 khz of VXO range
>
> That sounds good.
>
> and my local oscillator appears to be operating properly based on my
> ability to vary the offset using TC4.
>
> How are you setting TR4 so that the LO is correctly set with respect
> to the center of the receive pass band? The crystal filter has very
> steep sloped above and below the center, so if the LO setting isn't
> correct, you could be losing a great deal of signal, as much a 20-30
> dB or more.
>
> I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> > that problem is caused by not being able to develop enough voltage
> across the volume control.
>
> If the receiver is operating correctly, the AGC voltage will go well
> below 1.4 volts, just on antenna noise alone.
>
> I am comparing this circuits performance with an FT-1000 connected
> to the same antenna.
>
> The SS-40 is every bit as sensitive as your FT-1000 and probably more
> quiet.
>
> I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> control is turned up all the way and noise now bwcomes an issue.
>
> Something not right at all.
>
> I have resoldered all the connections and rechecked the components.
> It does work but not as I expected but I don"t have enough info to
> determin if it is working properly.
>
> It isn't, I can tell you that from what you have written.
>
> Has anybody developed a schematic with voltage readings or
> waveforms for troubleshooting?
>
> I have some of that information, but not in a convenient format for
> sharing. Mostly information in my lab notebooks that I keep as I
> develop a design.
>
> Any thoughs would be appreciated.
>
> See my comments above. If you can't get it working, send it to me at

> my call book address along with $10.00 for return shipping, and I will
> trouble shoot it and align it for you. Sorry you are having issues
> with your receiver.
>
> 72,
>
> Jim, K8IQY
>
>
>
>
>
>

# 558. Re: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-22 22:47:26 UTC
From: Dale Putnam
Topic: 554  Message: 558

If you want, send it to me?
Have a great day,
Dale - WC7S

-----Original Message-----
From: Jim Kortge <jim.k8iqy@...>
Date: Fri, 22 Feb 2013 22:26:06
To: <SS-40@yahoogroups.com>
Cc: <blackbelair@...>; <scottweathersby@...>
Subject: Re: [SS-40] ss-40 seems insensitive

On 2/22/2013 4:06 PM, blackbelair wrote:
>
>
>
> Hi Jim:

Hi Fred,

Can I send you my NS-40 for a check out?

No, please don't do that. I'm not in the "general repair" business,
especially for someone else' design. If I started doing that, I would
be swamped with work I couldn't possibly handle. I would send an
email to Dave Cripe, NM0S the NS-40 designer and see if he can help
you out. Dave's email is: NM0S david cripe ai9e_qrp@... <mailto:ai9e_qrp%40yahoo.com> >

I've never been able
> to get more than a few hundred milliwatts output from it.

My guess is that you've fried the IRF-510 in the final and all you are
seeing is the drive from the crystal oscillator.

> 73, Fred
> k6kub

72 and kind regards,

Jim, K8IQY

> ---------------------------------------------------------
> *From:* Jim Kortge jim.k8iqy@... <mailto:jim.k8iqy%40gmail.com> >
> *To:* SS-40@...m <mailto:SS-40%40yahoogroups.com>
> *Cc:* scottweathersby scottweathersby@... <mailto:scottweathersby%40msn.com> >
> *Sent:* Friday, February 22, 2013 7:50 AM
> *Subject:* Re: [SS-40] ss-40 seems insensitive
>
> On 2/21/2013 4:33 PM, scottweathersby wrote:

> > I have been evaluating my ss-40 for several weeks now. It does not
> appear to be as sensitive as I expected it to be.
>
> Sorry to hear that, but I suspect something isn't right in the
> receiver. It is a very sensitive, low noise design, and you are not
> seeing that.
>
> I have tweaked TC1, TC2 and TC3 using my scope while monitoring the
> audio out and I can peak all 3.
>
> Can you peak each of them in 360 degrees of rotation of the respective
> trimmers? If not, then they are not peaking correctly.
>
> I have 25 khz of VXO range
>
> That sounds good.
>
> and my local oscillator appears to be operating properly based on my
> ability to vary the offset using TC4.
>
> How are you setting TR4 so that the LO is correctly set with respect
> to the center of the receive pass band? The crystal filter has very
> steep sloped above and below the center, so if the LO setting isn't
> correct, you could be losing a great deal of signal, as much a 20-30
> dB or more.
>
> I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> > that problem is caused by not being able to develop enough voltage
> across the volume control.
>
> If the receiver is operating correctly, the AGC voltage will go well
> below 1.4 volts, just on antenna noise alone.
>
> I am comparing this circuits performance with an FT-1000 connected
> to the same antenna.
>
> The SS-40 is every bit as sensitive as your FT-1000 and probably more
> quiet.
>
> I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> control is turned up all the way and noise now bwcomes an issue.
>
> Something not right at all.
>
> I have resoldered all the connections and rechecked the components.
> It does work but not as I expected but I don"t have enough info to
> determin if it is working properly.
>
> It isn't, I can tell you that from what you have written.
>

> Has anybody developed a schematic with voltage readings or
> waveforms for troubleshooting?
>
> I have some of that information, but not in a convenient format for
> sharing. Mostly information in my lab notebooks that I keep as I
> develop a design.
>
> Any thoughs would be appreciated.
>
> See my comments above. If you can't get it working, send it to me at
> my call book address along with $10.00 for return shipping, and I will
> trouble shoot it and align it for you. Sorry you are having issues
> with your receiver.
>
> 72,
>
> Jim, K8IQY
>
>
>
>
>
>

# 559. Re: ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-23 00:47:01 UTC
From: scottweathersby
Topic: 554  Message: 559

Thanks Jim for the help. I will spend time this weekend and go over everything again. From what people are telling me this is a great receiver so will persue it until I get everything working. If I don't have success this weekend I probably will need another set of eyes on it and will send to you.

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 2/21/2013 4:33 PM, scottweathersby wrote:
> > I have been evaluating my ss-40 for several weeks now. It does not appear to be as sensitive as I expected it to be.
>
> Sorry to hear that, but I suspect something isn't right in the
> receiver. It is a very sensitive, low noise design, and you are not
> seeing that.
>
> I have tweaked TC1, TC2 and TC3 using my scope while monitoring the
> audio out and I can peak all 3.
>
> Can you peak each of them in 360 degrees of rotation of the respective
> trimmers? If not, then they are not peaking correctly.
>
> I have 25 khz of VXO range
>
> That sounds good.
>
> and my local oscillator appears to be operating properly based on my
> ability to vary the offset using TC4.
>
> How are you setting TR4 so that the LO is correctly set with respect
> to the center of the receive pass band? The crystal filter has very
> steep sloped above and below the center, so if the LO setting isn't
> correct, you could be losing a great deal of signal, as much a 20-30
> dB or more.
>
> I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> > that problem is caused by not being able to develop enough voltage across the volume control.
>
> If the receiver is operating correctly, the AGC voltage will go well
> below 1.4 volts, just on antenna noise alone.
>
> I am comparing this circuits performance with an FT-1000 connected
> to the same antenna.
>
> The SS-40 is every bit as sensitive as your FT-1000 and probably more

> quiet.
>
> I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> control is turned up all the way and noise now bwcomes an issue.
>
> Something not right at all.
>
> I have resoldered all the connections and rechecked the components.
> It does work but not as I expected but I don"t have enough info to
> determin if it is working properly.
>
> It isn't, I can tell you that from what you have written.
>
> Has anybody developed a schematic with voltage readings or
> waveforms for troubleshooting?
>
> I have some of that information, but not in a convenient format for
> sharing. Mostly information in my lab notebooks that I keep as I
> develop a design.
>
> Any thoughs would be appreciated.
>
> See my comments above. If you can't get it working, send it to me at
> my call book address along with $10.00 for return shipping, and I will
> trouble shoot it and align it for you. Sorry you are having issues
> with your receiver.
>
> 72,
>
> Jim, K8IQY
>

# 560. Re: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-23 01:35:35 UTC
From: blackbelair
Topic: 554  Message: 560

Ok. I've changed out the IRF-510 to no avail.
73, Fred
k6kub

---
From: Jim Kortge <jim.k8iqy@...>
To: SS-40@yahoogroups.com
Cc: blackbelair <blackbelair@...>; scottweathersby <scottweathersby@...>
Sent: Friday, February 22, 2013 2:26 PM
Subject: Re: [SS-40] ss-40 seems insensitive

On 2/22/2013 4:06 PM, blackbelair wrote:
>
>
>
> Hi Jim:

Hi Fred,

  Can I send you my NS-40 for a check out?

No, please don't do that.  I'm not in the "general repair" business, especially for someone else' design.  If I started doing that, I would be swamped with work I couldn't possibly handle.  I would send an email to Dave Cripe, NM0S the NS-40 designer and see if he can help you out.  Dave's email is:  NM0S david cripe <ai9e_qrp@...>

  I've never been able
> to get more than a few hundred milliwatts output from it.

My guess is that you've fried the IRF-510 in the final and all you are seeing is the drive from the crystal oscillator.

> 73, Fred
> k6kub

72 and kind regards,

Jim, K8IQY

> ---
> *From:* Jim Kortge <jim.k8iqy@...>
> *To:* SS-40@yahoogroups.com
> *Cc:* scottweathersby <scottweathersby@...>
> *Sent:* Friday, February 22, 2013 7:50 AM
> *Subject:* Re: [SS-40] ss-40 seems insensitive
>
> On 2/21/2013 4:33 PM, scottweathersby wrote:

>  > I have been evaluating my ss-40 for several weeks now. It does not
> appear to be as sensitive as I expected it to be.
>
> Sorry to hear that, but I suspect something isn't right in the
> receiver. It is a very sensitive, low noise design, and you are not
> seeing that.
>
> I have tweaked TC1, TC2 and TC3 using my scope while monitoring the
> audio out and I can peak all 3.
>
> Can you peak each of them in 360 degrees of rotation of the respective
> trimmers? If not, then they are not peaking correctly.
>
> I have 25 khz of VXO range
>
> That sounds good.
>
> and my local oscillator appears to be operating properly based on my
> ability to vary the offset using TC4.
>
> How are you setting TR4 so that the LO is correctly set with respect
> to the center of the receive pass band? The crystal filter has very
> steep sloped above and below the center, so if the LO setting isn't
> correct, you could be losing a great deal of signal, as much a 20-30
> dB or more.
>
> I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
>  > that problem is caused by not being able to develop enough voltage
> across the volume control.
>
> If the receiver is operating correctly, the AGC voltage will go well
> below 1.4 volts, just on antenna noise alone.
>
> I am comparing this circuits performance with an FT-1000 connected
> to the same antenna.
>
> The SS-40 is every bit as sensitive as your FT-1000 and probably more
> quiet.
>
> I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> control is turned up all the way and noise now bwcomes an issue.
>
> Something not right at all.
>
> I have resoldered all the connections and rechecked the components.
> It does work but not as I expected but I don"t have enough info to
> determin if it is working properly.
>
> It isn't, I can tell you that from what you have written.
>

> Has anybody developed a schematic with voltage readings or
> waveforms for troubleshooting?
>
> I have some of that information, but not in a convenient format for
> sharing. Mostly information in my lab notebooks that I keep as I
> develop a design.
>
> Any thoughs would be appreciated.
>
> See my comments above. If you can't get it working, send it to me at
> my call book address along with $10.00 for return shipping, and I will
> trouble shoot it and align it for you. Sorry you are having issues
> with your receiver.
>
> 72,
>
> Jim, K8IQY
>
>
>
>
>
>

# 561. RE: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-23 02:01:41 UTC
From: Dale Putnam
Topic: 554  Message: 561

Hey Hi Howdy Fred, Say, what's the chances of you being interested in sending that to me for a repair?You would be responsible for the shipping to/from and any parts. Then after you get it back in hand, and determine that it works like the specs say, then, if you wish,you can donate to my equipment and supply fund. I'd be happy to help.

Have a great day,

--... ...--
Dale - WC7S in Wy

To: jim.k8iqy@...; SS-40@yahoogroups.com
CC: scottweathersby@...
From: blackbelair@...
Date: Fri, 22 Feb 2013 17:35:35 -0800
Subject: Re: [SS-40] ss-40 seems insensitive

Ok. I've changed out the IRF-510 to no avail.73, Fredk6kub

From: Jim Kortge <jim.k8iqy@...>
To: SS-40@yahoogroups.com
Cc: blackbelair <blackbelair@...>; scottweathersby <scottweathersby@...>
Sent: Friday, February 22, 2013 2:26 PM
Subject: Re: [SS-40] ss-40 seems insensitive

On 2/22/2013 4:06 PM, blackbelair wrote:
>
>
>
> Hi Jim:

Hi Fred,

Can I send you my NS-40 for a check out?

No, please don't do that. I'm not in the "general repair" business, especially for someone else' design. If I started doing that, I would be swamped with work I couldn't possibly handle. I would send an email to Dave Cripe, NM0S the NS-40 designer and see if he can help you out. Dave's email is: NM0S david cripe <ai9e_qrp@...>

I've never been able
> to get more than a few hundred milliwatts output from it.

My guess is that you've fried the IRF-510 in the final and all you are seeing is the drive from the crystal oscillator.

> 73, Fred
> k6kub

72 and kind regards,

Jim, K8IQY

>
---
> *From:* Jim Kortge <jim.k8iqy@...>
> *To:* SS-40@yahoogroups.com
> *Cc:* scottweathersby <scottweathersby@...>
> *Sent:* Friday, February 22, 2013 7:50 AM
> *Subject:* Re: [SS-40] ss-40 seems insensitive
>
> On 2/21/2013 4:33 PM, scottweathersby wrote:
> > I have been evaluating my ss-40 for several weeks now. It does not
> appear to be as sensitive as I expected it to be.
>
> Sorry to hear that, but I suspect something isn't right in the
> receiver. It is a very sensitive, low noise design, and you are not
> seeing
that.
>
> I have tweaked TC1, TC2 and TC3 using my scope while monitoring the
> audio out and I can peak all 3.
>
> Can you peak each of them in 360 degrees of rotation of the respective
> trimmers? If not, then they are not peaking correctly.
>
> I have 25 khz of VXO range
>
> That sounds good.
>
> and my local oscillator appears to be operating properly based on my
> ability to vary the offset using TC4.
>
> How are you setting TR4 so that the LO is correctly set with respect
> to the center of the receive pass band? The crystal filter has very
> steep sloped above and below the center, so if the LO setting isn't
> correct, you could be losing a great deal of signal, as much a 20-30
> dB or more.
>
> I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> > that problem is caused by not being able to
develop enough voltage
> across the volume control.
>
> If the receiver is operating correctly, the AGC voltage will go well
> below 1.4 volts, just on antenna noise alone.
>
> I am comparing this circuits performance with an FT-1000 connected
> to the same antenna.
>
> The SS-40 is every bit as sensitive as your FT-1000 and probably more

> quiet.
>
> I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> control is turned up all the way and noise now bwcomes an issue.
>
> Something not right at all.
>
> I have resoldered all the connections and rechecked the components.
> It does work but not as I expected but I don"t have enough info to
> determin if it is working properly.
>
> It isn't, I can tell you that from what you have written.
>
> Has anybody developed a schematic with voltage readings
or
> waveforms for troubleshooting?
>
> I have some of that information, but not in a convenient format for
> sharing. Mostly information in my lab notebooks that I keep as I
> develop a design.
>
> Any thoughs would be appreciated.
>
> See my comments above. If you can't get it working, send it to me at
> my call book address along with $10.00 for return shipping, and I will
> trouble shoot it and align it for you. Sorry you are having issues
> with your receiver.
>
> 72,
>
> Jim, K8IQY
>
>
>
>
>
>

# 562. Re: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-23 09:03:12 UTC
From: blackbelair
Topic: 554  Message: 562

Hello Dale: Thank you for your offer to trouble-shoot this transmitter. I went as far as trying another IRF-510 before going on to another project. I remember someone in this group mentioning a flaw in the pcb but never got around to check that out. How would you like me to get this unit to you? Thanks again for your help.
73, Fred
k6kub

---
From: Dale Putnam <daleputnam@...>
To: Jim Kortge <jim.k8iqy@gmail.com>; "SS-40@yahoogroups.com " <SS-40@yahoogroups.com>
Cc: "blackbelair@yahoohlackbelair@...>; "scottweathersby@... " <scottweathersby@msn.com>
Sent: Friday, February 22, 2013 2:47 PM
Subject: Re: [SS-40] ss-40 seems insensitive

If you want, send it to me?
Have a great day,
Dale - WC7S

-----Original Message-----
From: Jim Kortge <jim.k8iqy@...>
Date: Fri, 22 Feb 2013 22:26:06
To: <SS-40@yahoogroups.com>
Cc: <blackbelair@yahoo.com>; <scottweathersby@...>
Subject: Re: [SS-40] ss-40 seems insensitive

On 2/22/2013 4:06 PM, blackbelair wrote:
>
>
>
> Hi Jim:

Hi Fred,

Can I send you my NS-40 for a check out?

No, please don't do that. I'm not in the "general repair" business,
especially for someone else' design. If I started doing that, I would
be swamped with work I couldn't possibly handle. I would send an
email to Dave Cripe, NM0S the NS-40 designer and see if he can help
you out. Dave's email is: NM0S david cripe ai9e_qrp@...<mailto:ai9e_qrp%40yahoo.com> >

I've never been able
> to get more than a few hundred milliwatts output from it.

My guess is that you've fried the IRF-510 in the final and all you are
seeing is the drive from the crystal oscillator.

> 73, Fred
> k6kub

72 and kind regards,

Jim, K8IQY

> ---
> *From:* Jim Kortge jim.k8iqy@...<mailto:jim.k8iqy%40gmail.com> >
> *To:* SS-40@yahoogroups.com<mailto:SS-40%40yahoogroups.com>
> *Cc:* scottweathersby scottweathersby@...<mailto:scottweathersby%40msn.com> >
> *Sent:* Friday, February 22, 2013 7:50 AM
> *Subject:* Re: [SS-40] ss-40 seems insensitive
>
> On 2/21/2013 4:33 PM, scottweathersby wrote:
> > I have been evaluating my ss-40 for several weeks now. It does not
> appear to be as sensitive as I expected it to be.
>
> Sorry to hear that, but I suspect something isn't right in the
> receiver. It is a very sensitive, low noise design, and you are not
> seeing that.
>
> I have tweaked TC1, TC2 and TC3 using my scope while monitoring the
> audio out and I can peak all 3.
>
> Can you peak each of them in 360 degrees of rotation of the respective
> trimmers? If not, then they are not peaking correctly.
>
> I have 25 khz of VXO range
>
> That sounds good.
>
> and my local oscillator appears to be operating properly based on my
> ability to vary the offset using TC4.
>
> How are you setting TR4 so that the LO is correctly set with respect
> to the center of the receive pass band? The crystal filter has very
> steep sloped above and below the center, so if the LO setting isn't
> correct, you could be losing a great deal of signal, as much a 20-30
> dB or more.
>
> I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> > that problem is caused by not being able to develop enough voltage
> across the volume control.
>
> If the receiver is operating correctly, the AGC voltage will go well
> below 1.4 volts, just on antenna noise alone.
>
> I am comparing this circuits performance with an FT-1000 connected
> to the same antenna.
>
> The SS-40 is every bit as sensitive as your FT-1000 and probably more

> quiet.
>
> I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> control is turned up all the way and noise now bwcomes an issue.
>
> Something not right at all.
>
> I have resoldered all the connections and rechecked the components.
> It does work but not as I expected but I don"t have enough info to
> determin if it is working properly.
>
> It isn't, I can tell you that from what you have written.
>
> Has anybody developed a schematic with voltage readings or
> waveforms for troubleshooting?
>
> I have some of that information, but not in a convenient format for
> sharing. Mostly information in my lab notebooks that I keep as I
> develop a design.
>
> Any thoughs would be appreciated.
>
> See my comments above. If you can't get it working, send it to me at
> my call book address along with $10.00 for return shipping, and I will
> trouble shoot it and align it for you. Sorry you are having issues
> with your receiver.
>
> 72,
>
> Jim, K8IQY
>
>
>
>
>
>

# 563. RE: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-23 13:53:01 UTC
From: Dale Putnam
Topic: 554  Message: 563

Hi Fred, You're very welcome, no problem. I've had good luck with USPS flat rate boxes. UPS works too. But it is pricey over USPS, I think.It may very well be a board issue, we'll see. I'll be watching for it My address: Dale - WC7S5503 N. College Dr.Cheyenne, Wy. 82009

Have a great day,

--... ...--
Dale - WC7S in Wy

To: daleputnam@...; jim.k8iqy@...; SS-40@yahoogroups.com
CC: scottweathersby@...
From: blackbelair@...
Date: Sat, 23 Feb 2013 01:03:12 -0800
Subject: Re: [SS-40] ss-40 seems insensitive

Hello Dale: Thank you for your offer to trouble-shoot this transmitter. I went as far as trying another IRF-510 before going on to another project. I remember someone in this group mentioning a flaw in the pcb but never got around to check that out. How would you like me to get this unit to you? Thanks again for your help.73, Fredk6kub
From: Dale Putnam <daleputnam@hotmail.com>
To: Jim Kortge <jim.k8iqy@...>; "SS-40@yahoogroups.com " <SS-40@yahoogroups.com>
Cc: "blackbelair@yahoohlackbelair@...>; "scottweathersby@... " <scottweathersby@...>
Sent: Friday, February 22, 2013 2:47 PM
Subject: Re: [SS-40] ss-40 seems insensitive

If you want, send it to me?
Have a great day,
Dale - WC7S

-----Original Message-----
From: Jim Kortge <jim.k8iqy@...>
Date: Fri, 22 Feb 2013 22:26:06
To: <SS-40@yahoogroups.com>
Cc: <blackbelair@...>; <scottweathersby@...>
Subject: Re: [SS-40] ss-40 seems insensitive

On 2/22/2013 4:06 PM, blackbelair wrote:
>
>
>
> Hi Jim:

Hi Fred,

Can I send you my NS-40 for a check out?

No, please don't do that. I'm not in the "general repair" business, especially for someone else' design. If I started doing that, I would

be swamped with work I couldn't possibly handle. I would send an email to Dave Cripe, NM0S the NS-40 designer and see if he can help you out. Dave's email is: NM0S david cripe ai9e_qrp@... <mailto:ai9e_qrp%40yahoo.com> >

I've never been able
> to get more than a few hundred milliwatts output from it.

My guess is that you've fried the IRF-510 in the final and all you are seeing is the drive from the crystal oscillator.

> 73, Fred
> k6kub

72 and kind regards,

Jim, K8IQY

> ---
> *From:* Jim Kortge jim.k8iqy@gmail.com <mailto:jim.k8iqy%40gmail.com> >
> *To:* SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>
> *Cc:* scottweathersby scottweathersby@msn.com <mailto:scottweathersby%40msn.com> >
> *Sent:* Friday, February 22, 2013 7:50 AM
> *Subject:* Re: [SS-40] ss-40 seems insensitive
>
> On 2/21/2013 4:33 PM, scottweathersby wrote:
> > I have been evaluating my ss-40 for several weeks now. It does not
> appear to be as sensitive as I expected it to be.
>
> Sorry to hear that, but I suspect something isn't right in the
> receiver. It is a very sensitive, low noise design, and you are not
> seeing that.
>
> I have tweaked TC1, TC2 and TC3 using my scope while monitoring the
> audio out and I can peak all 3.
>
> Can you peak each of them in 360 degrees of rotation of the respective
> trimmers? If not, then they are not peaking correctly.
>
> I have 25 khz of VXO range
>
> That sounds good.
>
> and my local oscillator appears to be operating properly based on my
>
ability to vary the offset using TC4.
>
> How are you setting TR4 so that the LO is correctly set with respect
> to the center of the receive pass band? The crystal filter has very
> steep sloped above and below the center, so if the LO setting isn't
> correct, you could be losing a great deal of signal, as much a 20-30

> dB or more.
>
> I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> > that problem is caused by not being able to develop enough voltage
> across the volume control.
>
> If the receiver is operating correctly, the AGC voltage will go well
> below 1.4 volts, just on antenna noise alone.
>
> I am comparing this circuits performance with an FT-1000 connected
> to the same antenna.
>
> The SS-40 is every bit as sensitive as your FT-1000 and probably more
> quiet.
>
> I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> control is turned up all the way and noise now bwcomes an issue.
>
> Something not right at all.
>
> I have resoldered all the connections and rechecked the components.
> It does work but not as I expected but I don"t have enough info to
> determin if it is working properly.
>
> It isn't, I can tell you that from what you have written.
>
> Has anybody developed a schematic with voltage readings or
> waveforms for troubleshooting?
>
> I have some of that information, but
not in a convenient format for
> sharing. Mostly information in my lab notebooks that I keep as I
> develop a design.
>
> Any thoughs would be appreciated.
>
> See my comments above. If you can't get it working, send it to me at
> my call book address along with $10.00 for return shipping, and I will
> trouble shoot it and align it for you. Sorry you are having issues
> with your receiver.
>
> 72,
>
> Jim, K8IQY
>
>
>
>
>
>

# 564. RE: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-23 14:29:43 UTC
From: wa0itp@...
Topic: 554  Message: 564

Fred, Dale, et al,

I don't recall any board issues with the NS-40. A few, very few, builders have had a little difficulty soldering in the crystal/2N7000 area due to the closeness of the components.

This should be an easy fix for you Dale.

I wish the thread hadn't been hijacked , it doesn't belong in the SS-40 group. It should have been posted in the NS-40 Yahoo Group instead.

72 Terry WAØITP

----- Original Message -----
From: Dale Putnam <daleputnam@...>
To: SS-40@yahoogroups.com <ss-40@...m>
Sent: Sat, 23 Feb 2013 07:53:01 -0600 (CST)
Subject: RE: [SS-40] ss-40 seems insensitive

Hi Fred, You're very welcome, no problem. I've had good luck with USPS flat rate boxes. UPS works too. But it is pricey over USPS, I think.It may very well be a board issue, we'll see. I'll be watching for it My address: Dale - WC7S5503 N. College Dr.Cheyenne, Wy. 82009

Have a great day,

--... ...--
Dale - WC7S in Wy

To: daleputnam@hotmail.com; jim.k8iqy@...; SS-40@yahoogroups.com
CC: scottweathersby@msn.com
From: blackbelair@...
Date: Sat, 23 Feb 2013 01:03:12 -0800
Subject: Re: [SS-40] ss-40 seems insensitive

Hello Dale: Thank you for your offer to trouble-shoot this transmitter. I went as far as trying another IRF-510 before going on to another project. I remember someone in this group mentioning a flaw in the pcb but never got around to check that out. How would you like me to get this unit to you? Thanks again for your help.73, Fredk6kub
From: Dale Putnam <daleputnam@...>
To: Jim Kortge <jim.k8iqy@...>; "SS-40@yahoogroups.com " <SS-40@yahoogroups.com>
Cc: "blackbelair@yahoohlackbelair@...>; "scottweathersby@... " <scottweathersby@...>
Sent: Friday, February 22, 2013 2:47 PM
Subject: Re: [SS-40] ss-40 seems insensitive

If you want, send it to me?
Have a great day,
Dale - WC7S

-----Original Message-----
From: Jim Kortge <jim.k8iqy@...>
Date: Fri, 22 Feb 2013 22:26:06
To: <SS-40@yahoogroups.com>
Cc: <blackbelair@yahoo.com>; <scottweathersby@...>
Subject: Re: [SS-40] ss-40 seems insensitive

On 2/22/2013 4:06 PM, blackbelair wrote:
>
>
>
> Hi Jim:

Hi Fred,

Can I send you my NS-40 for a check out?

No, please don't do that. I'm not in the "general repair" business,
especially for someone else' design. If I started doing that, I would

be swamped with work I couldn't possibly handle. I would send an
email to Dave Cripe, NM0S the NS-40 designer and see if he can help
you out. Dave's email is: NM0S david cripe ai9e_qrp@yahoo.com
<mailto:ai9e_qrp%40yahoo.com> >

I've never been able
> to get more than a few hundred milliwatts output from it.

My guess is that you've fried the IRF-510 in the final and all you are
seeing is the drive from the crystal oscillator.

> 73, Fred
> k6kub

72 and kind regards,

Jim, K8IQY

> ----------
> *From:* Jim Kortge jim.k8iqy@... <mailto:jim.k8iqy%40gmail.com> >
> *To:* SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>
> *Cc:* scottweathersby scottweathersby@... <mailto:scottweathersby%40msn.com> >
> *Sent:* Friday, February 22, 2013 7:50 AM
> *Subject:* Re: [SS-40] ss-40 seems insensitive
>
> On 2/21/2013 4:33 PM, scottweathersby wrote:
> > I have been evaluating my ss-40 for several weeks now. It does not
> appear to be as sensitive as I expected it to be.
>
> Sorry to hear that, but I suspect something isn't right in the
> receiver. It is a very sensitive, low noise design, and you are not
> seeing that.
>
> I have tweaked TC1, TC2 and TC3 using my scope while monitoring the

> audio out and I can peak all 3.
>
> Can you peak each of them in 360 degrees of rotation of the respective
> trimmers? If not, then they are not peaking correctly.
>
> I have 25 khz of VXO range
>
> That sounds good.
>
> and my local oscillator appears to be operating properly based on my
>
ability to vary the offset using TC4.
>
> How are you setting TR4 so that the LO is correctly set with respect
> to the center of the receive pass band? The crystal filter has very
> steep sloped above and below the center, so if the LO setting isn't
> correct, you could be losing a great deal of signal, as much a 20-30
> dB or more.
>
> I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> > that problem is caused by not being able to develop enough voltage
> across the volume control.
>
> If the receiver is operating correctly, the AGC voltage will go well
> below 1.4 volts, just on antenna noise alone.
>
> I am comparing this circuits performance with an FT-1000 connected
> to the same antenna.
>
> The SS-40 is every bit as sensitive as your FT-1000 and probably more
> quiet.
>
> I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> control is turned up all the way and noise now bwcomes an issue.
>
> Something not right at all.
>
> I have resoldered all the connections and rechecked the components.
> It does work but not as I expected but I don"t have enough info to
> determin if it is working properly.
>
> It isn't, I can tell you that from what you have written.
>
> Has anybody developed a schematic with voltage readings or
> waveforms for troubleshooting?
>
> I have some of that information, but
not in a convenient format for
> sharing. Mostly information in my lab notebooks that I keep as I
> develop a design.

>
> Any thoughs would be appreciated.
>
> See my comments above. If you can't get it working, send it to me at
> my call book address along with $10.00 for return shipping, and I will
> trouble shoot it and align it for you. Sorry you are having issues
> with your receiver.
>
> 72,
>
> Jim, K8IQY
>
>
>
>
>
>

# 565. Re: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-25 22:55:08 UTC
From: blackbelair
Topic: 554  Message: 565

Hello Dale: My NS-40 is in the hands of the USPS as of this afternoon. I was told you will have it next mon. I shipped it mounted in its tp41 case with the jacks wired to the board. The original IRF-510 is taped to the pcb, maybe it's still good. Thanks again, Dale, for taking the time to check it out. We'll keep in touch.
73, Fred
k6kub

---
From: Dale Putnam <daleputnam@...>
To: "SS-40@yahoogroups.com" <ss-40@yahoogroups.com>
Sent: Saturday, February 23, 2013 5:53 AM
Subject: RE: [SS-40] ss-40 seems insensitive

Hi Fred,
  You're very welcome, no problem.
  I've had good luck with USPS flat rate boxes. UPS works too. But it is pricey over USPS, I think.
It may very well be a board issue, we'll see.
  I'll be watching for it

My address:

Dale - WC7S
5503 N. College Dr.
Cheyenne, Wy. 82009

Have a great day,

--... ...--
Dale - WC7S in Wy

---
To: daleputnam@...; jim.k8iqy@gmail.com; SS-40@yahoogroups.com
CC: scottweathersby@...
From: blackbelair@...
Date: Sat, 23 Feb 2013 01:03:12 -0800
Subject: Re: [SS-40] ss-40 seems insensitive

Hello Dale: Thank you for your offer to trouble-shoot this transmitter. I went as far as trying another IRF-510 before going on to another project. I remember someone in this group mentioning a flaw in the pcb but never got around to check that out. How would you like me to get this unit to you? Thanks again for your help.
73, Fred
k6kub

---
From: Dale Putnam <daleputnam@...>

To: Jim Kortge <jim.k8iqy@...>; "SS-40@yahoogroups.com " <SS-40@yahoogroups.com>
Cc: "blackbelair@yahoohlackbelair@...>; "scottweathersby@msn.com " <scottweathersby@...>
Sent: Friday, February 22, 2013 2:47 PM
Subject: Re: [SS-40] ss-40 seems insensitive

If you want, send it to me?
Have a great day,
Dale - WC7S

-----Original Message-----
From: Jim Kortge <jim.k8iqy@...>
Date: Fri, 22 Feb 2013 22:26:06
To: <SS-40@yahoogroups.com>
Cc: <blackbelair@...>; <scottweathersby@...>
Subject: Re: [SS-40] ss-40 seems insensitive

On 2/22/2013 4:06 PM, blackbelair wrote:
>
>
>
> Hi Jim:

Hi Fred,

Can I send you my NS-40 for a check out?

No, please don't do that. I'm not in the "general repair" business,
especially for someone else' design. If I started doing that, I would
be swamped with work I couldn't possibly handle. I would send an
email to Dave Cripe, NM0S the NS-40 designer and see if he can help
you out. Dave's email is: NM0S david cripe ai9e_qrp@...<mailto:ai9e_qrp%40yahoo.com> >

I've never been able
> to get more than a few hundred milliwatts output from it.

My guess is that you've fried the IRF-510 in the final and all you are
seeing is the drive from the crystal oscillator.

> 73, Fred
> k6kub

72 and kind regards,

Jim, K8IQY

> ----------
> *From:* Jim Kortge jim.k8iqy@...<mailto:jim.k8iqy%40gmail.com> >
> *To:* SS-40@yahoogroups.com<mailto:SS-40%40yahoogroups.com>
> *Cc:* scottweathersby scottweathersby@...<mailto:scottweathersby%40msn.com> >
> *Sent:* Friday, February 22, 2013 7:50 AM
> *Subject:* Re: [SS-40] ss-40 seems insensitive
>
> On 2/21/2013 4:33 PM, scottweathersby wrote:

> > I have been evaluating my ss-40 for several weeks now. It does not
> appear to be as sensitive as I expected it to be.
>
> Sorry to hear that, but I suspect something isn't right in the
> receiver. It is a very sensitive, low noise design, and you are not
> seeing that.
>
> I have tweaked TC1, TC2 and TC3 using my scope while monitoring the
> audio out and I can peak all 3.
>
> Can you peak each of them in 360 degrees of rotation of the respective
> trimmers? If not, then they are not peaking correctly.
>
> I have 25 khz of VXO range
>
> That sounds good.
>
> and my local oscillator appears to be operating properly based on my
> ability to vary the offset using TC4.
>
> How are you setting TR4 so that the LO is correctly set with respect
> to the center of the receive pass band? The crystal filter has very
> steep sloped above and below the center, so if the LO setting isn't
> correct, you could be losing a great deal of signal, as much a 20-30
> dB or more.
>
> I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> > that problem is caused by not being able to develop enough voltage
> across the volume control.
>
> If the receiver is operating correctly, the AGC voltage will go well
> below 1.4 volts, just on antenna noise alone.
>
> I am comparing this circuits performance with an FT-1000 connected
> to the same antenna.
>
> The SS-40 is every bit as sensitive as your FT-1000 and probably more
> quiet.
>
> I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> control is turned up all the way and noise now bwcomes an issue.
>
> Something not right at all.
>
> I have resoldered all the connections and rechecked the components.
> It does work but not as I expected but I don"t have enough info to
> determin if it is working properly.
>
> It isn't, I can tell you that from what you have written.
>

> Has anybody developed a schematic with voltage readings or
> waveforms for troubleshooting?
>
> I have some of that information, but not in a convenient format for
> sharing. Mostly information in my lab notebooks that I keep as I
> develop a design.
>
> Any thoughs would be appreciated.
>
> See my comments above. If you can't get it working, send it to me at
> my call book address along with $10.00 for return shipping, and I will
> trouble shoot it and align it for you. Sorry you are having issues
> with your receiver.
>
> 72,
>
> Jim, K8IQY
>
>
>
>
>
>

# 566. RE: [SS-40] ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-02-25 23:04:52 UTC
From: Dale Putnam
Topic: 554  Message: 566

Thank you Fred, I'll be watching for it.

Have a great day,

--... ...--
Dale - WC7S in Wy

To: SS-40@yahoogroups.com
From: blackbelair@yahoo.com
Date: Mon, 25 Feb 2013 14:55:08 -0800
Subject: Re: [SS-40] ss-40 seems insensitive

Hello Dale: My NS-40 is in the hands of the USPS as of this afternoon. I was told you will have it next mon. I shipped it mounted in its tp41 case with the jacks wired to the board. The original IRF-510 is taped to the pcb, maybe it's still good. Thanks again, Dale, for taking the time to check it out. We'll keep in touch.73, Fredk6kub
From: Dale Putnam <daleputnam@hotmail.com>
To: "SS-40@yahoogroups.com" <ss-40@yahoogroups.com>
Sent: Saturday, February 23, 2013 5:53 AM
Subject: RE: [SS-40] ss-40 seems insensitive

Hi Fred,
You're very welcome, no problem.
I've had good luck with USPS flat rate boxes. UPS works too. But it is pricey over USPS, I think.
It may very well be a board issue, we'll see.
I'll be watching for it

My address:

Dale - WC7S
5503 N. College Dr.
Cheyenne, Wy. 82009

Have a great day,

--... ...--
Dale - WC7S in Wy

To: daleputnam@...; jim.k8iqy@...; SS-40@yahoogroups.com
CC: scottweathersby@...
From: blackbelair@...
Date: Sat, 23 Feb 2013 01:03:12 -0800
Subject: Re: [SS-40] ss-40 seems insensitive

Hello Dale: Thank you for your offer to trouble-shoot this transmitter. I went as far as trying another IRF-510 before going on to another project. I remember someone in this group mentioning a flaw in the pcb but never got around to check that out. How would you like me

to get this unit to you? Thanks again for your help.73, Fredk6kub
From: Dale Putnam <daleputnam@...>
To: Jim Kortge <jim.k8iqy@...>; "SS-40@yahoogroups.com " <SS-40@yahoogroups.com>
Cc: "blackbelair@yahoohlackbelair@...>; "scottweathersby@... " <scottweathersby@...>
Sent: Friday, February 22, 2013 2:47 PM
Subject: Re: [SS-40] ss-40 seems insensitive

If you want, send it to me?
Have a great day,
Dale - WC7S

-----Original Message-----
From: Jim Kortge <jim.k8iqy@...>
Date: Fri, 22 Feb 2013 22:26:06
To: <SS-40@yahoogroups.com>
Cc: <blackbelair@...>; <scottweathersby@...>
Subject: Re: [SS-40] ss-40 seems insensitive

On 2/22/2013 4:06 PM, blackbelair wrote:
>
>
>
> Hi Jim:

Hi Fred,

Can I send you my NS-40 for a check out?

No, please don't do that. I'm not in the "general repair"
business,
especially for someone else' design. If I started doing that, I would

be swamped with work I couldn't possibly handle. I would send an
email to Dave Cripe, NM0S the NS-40 designer and see if he can help
you out. Dave's email is: NM0S david cripe ai9e_qrp@... <mailto:ai9e_qrp%40yahoo.com> >

I've never been able
> to get more than a few hundred milliwatts output from it.

My guess is that you've fried the IRF-510 in the final and all you are
seeing is the drive from the crystal oscillator.

> 73,
Fred
> k6kub

72 and kind regards,

Jim, K8IQY

> ---
> *From:* Jim Kortge jim.k8iqy@... <mailto:jim.k8iqy%40gmail.com> >
> *To:* SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>
> *Cc:* scottweathersby scottweathersby@... <mailto:scottweathersby%40msn.com> >

> *Sent:* Friday, February 22, 2013 7:50 AM
> *Subject:* Re: [SS-40] ss-40 seems insensitive
>
> On 2/21/2013 4:33 PM, scottweathersby wrote:
> > I have been evaluating my ss-40 for several weeks now. It does not
> appear to be as sensitive as I expected it to be.
>
> Sorry to hear that, but I suspect something isn't right in the
> receiver. It is a
very sensitive, low noise design, and you are not
> seeing that.
>
> I have tweaked TC1, TC2 and TC3 using my scope while monitoring the
> audio out and I can peak all 3.
>
> Can you peak each of them in 360 degrees of rotation of the respective
> trimmers? If not, then they are not peaking correctly.
>
> I have 25 khz of VXO range
>
> That sounds good.
>
> and my local oscillator appears to be operating
properly based on my
>
ability to vary the offset using TC4.
>
> How are you setting TR4 so that the LO is correctly set with respect
> to the center of the receive pass band? The crystal filter has very
> steep sloped above and below the center, so if the LO setting isn't
> correct, you could be losing a great deal of signal, as much a 20-30
> dB or more.
>
> I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> > that problem is caused by not being able to develop enough voltage
> across the volume control.
>
> If the receiver is operating correctly, the AGC voltage will go well
> below 1.4 volts, just on antenna noise alone.
>
> I am comparing this circuits performance with an FT-1000 connected
> to the same antenna.
>
> The SS-40 is every bit as sensitive as your FT-1000 and probably more
> quiet.
>
> I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> control is turned up all the way and noise now bwcomes an issue.
>
> Something not right at all.

>
> I have resoldered all the connections and rechecked the components.
> It does work but not as I expected but I don"t have enough info to
> determin if it is working properly.
>
> It isn't, I can tell you that from what you have written.
>
> Has anybody developed a schematic with voltage readings or
> waveforms for troubleshooting?
>
> I have some of that information, but
not in a convenient format for
> sharing. Mostly information in my lab notebooks that I keep as I
> develop a design.
>
> Any thoughs would be appreciated.
>
> See my comments above. If you can't get it working, send it to me at
> my call book address along with $10.00 for return shipping, and I will
> trouble shoot it and align it for you. Sorry you are having issues
> with your receiver.
>
> 72,
>
>
Jim, K8IQY
>
>
>
>
>
>

# 567. Fwd: Re: Problem Solved!

Yahoo group: SS-40
Date: 2013-03-14 14:35:22 UTC
From: Jim Kortge
Topic: 567  Message: 567

Gang,

Info that you might be interested in. I accidently sent this to the
SAVXO group, but maybe it is relevant there also.

72,

Jim, K8IQY

-------- Original Message --------
Subject: Re: Problem Solved!
Date: Thu, 14 Mar 2013 10:12:55 -0400
From: Jim Kortge <jim.k8iqy@...>
To: Djwilcox01@..., savxok8iqy@yahoogroups.com

On 3/13/2013 9:22 PM, Djwilcox01@... wrote:
> Jim,

Good morning Dave,

> I replaced the choke with a 4.7 (really 4.46 uH measured on my AADE
> inductance meter..... it was consistent each time I retested it) and
> the frequency moved from 7.033 through 7.043 taking away the 7.030 Mhz
> segment.

That's not good is it. :-(

Replaced it with a 5.2 (5.45 uH) choke and the range went
> from 7.013 - 7.036. Remeasured the choke in the kit for L9 and it
> measured in at 5.6 uH which is correct. The band spread was 7.016 -
> 7.0395.

Nice span but misses the sweet spot at 7.040, which is why you emailed
me in the first place.

> I put it back in and went to a 12 volt supply and lo and behold....
> the band spread is now 7.015 - 7.043 Mhz.

Ah ha....that factoid is one that I didn't know about. Must be with 9
volts on the supply the oscillator isn't fully functioning or it has
something to do with the varicap diode tuning being less than what was
designed in.

So another problem that
> occurs with 9 volts. Unstable and off frequency.

Yes, good information to have.

> Anyway it is back in its case waiting for some better time to play
> with it.
> Thanks again.

You bet. Thanks so much for keeping me posted on your experiments.
I'm going to post the above results to the SAVXO Support Group.
Others will want to know about the 9 volt supply issue with respect to
stability and tuning range.

72,

Jim, K8IQY

# 568. Re: ss-40 seems insensitive

Yahoo group: SS-40
Date: 2013-03-29 20:31:18 UTC
From: fred
Topic: 554  Message: 568

Hi Dale, Have you been able to de-bug my ns-40? I was also wondering if
the original irf-510 is still usable?Fred, k6kub
--- In SS-40@yahoogroups.com, Dale Putnam <daleputnam@...> wrote:
>
> Thank you Fred, I'll be watching for it.
>
> Have a great day,
>
>
> --... ...--
> Dale - WC7S in Wy
>
>
>
> To: SS-40@yahoogroups.com
> From: blackbelair@...
> Date: Mon, 25 Feb 2013 14:55:08 -0800
> Subject: Re: [SS-40] ss-40 seems insensitive
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> Hello Dale: My NS-40 is in the hands of the USPS as of this

afternoon. I was told you will have it next mon. I shipped it mounted in its tp41 case with the jacks wired to the board. The original IRF-510 is taped to the pcb, maybe it's still good. Thanks again, Dale, for taking the time to check it out. We'll keep in touch.73, Fredk6kub
> From: Dale Putnam daleputnam@...
> To: "SS-40@yahoogroups.com" ss-40@yahoogroups.com
> Sent: Saturday, February 23, 2013 5:53 AM
> Subject: RE: [SS-40] ss-40 seems insensitive
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> Hi Fred,
> You're very welcome, no problem.
> I've had good luck with USPS flat rate boxes. UPS works too. But it is pricey over USPS, I think.
> It may very well be a board issue, we'll see.
> I'll be watching for it
>
> My address:
>
> Dale - WC7S
> 5503 N. College Dr.
> Cheyenne, Wy. 82009
>
> Have a great day,
>
>

> --... ...--
> Dale - WC7S in Wy
>
>
>
>
> To: daleputnam@...; jim.k8iqy@...; SS-40@yahoogroups.com
> CC: scottweathersby@...
> From: blackbelair@...
> Date: Sat, 23 Feb 2013 01:03:12 -0800
> Subject: Re: [SS-40] ss-40 seems insensitive
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> Hello Dale: Thank you for your offer to trouble-shoot this
transmitter. I went as far as trying another IRF-510 before going on to
another project. I remember someone in this group mentioning a flaw in
the pcb but never got around to check that out. How would you like me to
get this unit to you? Thanks again for your help.73, Fredk6kub
> From: Dale Putnam daleputnam@...
> To: Jim Kortge jim.k8iqy@...; "SS-40@yahoogroups.com "
SS-40@yahoogroups.com
> Cc: "blackbelair@yahoohlackbelair@...>; "scottweathersby@... "
scottweathersby@...
> Sent: Friday, February 22, 2013 2:47 PM
> Subject: Re: [SS-40] ss-40 seems insensitive
>

>
>
> If you want, send it to me?
> Have a great day,
> Dale - WC7S
>
> -----Original Message-----
> From: Jim Kortge jim.k8iqy@...
> Date: Fri, 22 Feb 2013 22:26:06
> To: SS-40@yahoogroups.com
> Cc: blackbelair@...; scottweathersby@...
> Subject: Re: [SS-40] ss-40 seems insensitive
>
>
>
>
>
> On 2/22/2013 4:06 PM, blackbelair wrote:
> >
> >
> >
> > Hi Jim:
>
> Hi Fred,
>
> Can I send you my NS-40 for a check out?
>
> No, please don't do that. I'm not in the "general repair"
> business,
> especially for someone else' design. If I started doing that, I would
>
> be swamped with work I couldn't possibly handle. I would send an
> email to Dave Cripe, NM0S the NS-40 designer and see if he can help
> you out. Dave's email is: NM0S david cripe ai9e_qrp@...
<mailto:ai9e_qrp%40yahoo.com> >
>
> I've never been able
> > to get more than a few hundred milliwatts output from it.
>
> My guess is that you've fried the IRF-510 in the final and all you are
> seeing is the drive from the crystal oscillator.
>
> > 73,
> Fred
> > k6kub
>
> 72 and kind regards,
>
> Jim, K8IQY
>

> > ----------
> > *From:* Jim Kortge jim.k8iqy@... <mailto:jim.k8iqy%40gmail.com> >
> > *To:* SS-40@yahoogroups.com <mailto:SS-40%40yahoogroups.com>
> > *Cc:* scottweathersby scottweathersby@...
<mailto:scottweathersby%40msn.com> >
> > *Sent:* Friday, February 22, 2013 7:50 AM
> > *Subject:* Re: [SS-40] ss-40 seems insensitive
> >
> > On 2/21/2013 4:33 PM, scottweathersby wrote:
> > > I have been evaluating my ss-40 for several weeks now. It does not
> > appear to be as sensitive as I expected it to be.
> >
> > Sorry to hear that, but I suspect something isn't right in the
> > receiver. It is a
> very sensitive, low noise design, and you are not
> > seeing that.
> >
> > I have tweaked TC1, TC2 and TC3 using my scope while monitoring the
> > audio out and I can peak all 3.
> >
> > Can you peak each of them in 360 degrees of rotation of the
respective
> > trimmers? If not, then they are not peaking correctly.
> >
> > I have 25 khz of VXO range
> >
> > That sounds good.
> >
> > and my local oscillator appears to be operating
> properly based on my
> >
> ability to vary the offset using TC4.
> >
> > How are you setting TR4 so that the LO is correctly set with respect
> > to the center of the receive pass band? The crystal filter has very
> > steep sloped above and below the center, so if the LO setting isn't
> > correct, you could be losing a great deal of signal, as much a 20-30
> > dB or more.
> >
> > I cannot get Tr1 to drop the voltage below 1.4 volts but I believe
> > > that problem is caused by not being able to develop enough voltage
> > across the volume control.
> >
> > If the receiver is operating correctly, the AGC voltage will go well
> > below 1.4 volts, just on antenna noise alone.
> >
> > I am comparing this circuits performance with an FT-1000 connected
> > to the same antenna.
> >
> > The SS-40 is every bit as sensitive as your FT-1000 and probably

more
> > quiet.
> >
> > I can hear an s5 signal on the FT-1000 on the SS-40 but the voloume
> > control is turned up all the way and noise now bwcomes an issue.
> >
> > Something not right at all.
> >
> > I have resoldered all the connections and rechecked the components.
> > It does work but not as I expected but I don"t have enough info to
> > determin if it is working properly.
> >
> > It isn't, I can tell you that from what you have written.
> >
> > Has anybody developed a schematic with voltage readings or
> > waveforms for troubleshooting?
> >
> > I have some of that information, but
> not in a convenient format for
> > sharing. Mostly information in my lab notebooks that I keep as I
> > develop a design.
> >
> > Any thoughs would be appreciated.
> >
> > See my comments above. If you can't get it working, send it to me at
> > my call book address along with $10.00 for return shipping, and I
will
> > trouble shoot it and align it for you. Sorry you are having issues
> > with your receiver.
> >
> > 72,
> >
> >
> Jim, K8IQY
> >
> >
> >
> >
> >
> >
>

# 569. cost ss40

Yahoo group: SS-40
Date: 2013-04-08 17:39:46 UTC
From: w7utp
Topic: 569  Message: 569

I must be missing it for sure but I can't seem to fine the cost of this beautiful little radio, can some one send me an email. thanks in advance Bob w7utp

# 570. Re: [SS-40] cost ss40

Yahoo group: SS-40
Date: 2013-04-08 17:53:14 UTC
From: beargyrils@...
Topic: 569  Message: 570

I think the cost is around $35.00 from the 4 States QRP CLUB
The SS-40 high performance receiver is the latest design ... Covering the 40M QRP "watering holes", a. Super VXO ... NMØS NS-40 Transmitter Kit price $30.00
BOB AF2Q

In a message dated 4/8/2013 10:39:52 A.M. Pacific Daylight Time, w7utp@... writes:

I must be missing it for sure but I can't seem to fine the cost of this beautiful little radio, can some one send me an email. thanks in advance Bob w7utp

# 571. Re: [SS-40] cost ss40

Yahoo group: SS-40
Date: 2013-04-08 18:00:55 UTC
From: Bart Lawson
Topic: 569  Message: 571

Bob,

Right now the rcvr is out of stock. A new run is being planned and when it is available a order page will be set back up!

cu es 72, Bart W0IIT

# 572. Re: [SS-40] cost ss40

Yahoo group: SS-40
Date: 2013-04-08 18:04:04 UTC
From: beargyrils@...
Topic: 569  Message: 572

Thanks Bart,
I watched some U tubes on that RX and it has one hot receiver.
I'll keep checking back.
Thanks for responding
BOB AF2Q

In a message dated 4/8/2013 11:01:04 A.M. Pacific Daylight Time,
blawson2@... writes:

Bob,

Right now the rcvr is out of stock. A new run is being planned and when it
is available a order page will be set back up!

cu es 72, Bart W0IIT

# 573. Re: cost ss40

Yahoo group: SS-40
Date: 2013-04-09 16:44:44 UTC
From: Tom
Topic: 569  Message: 573

I believe the kit was in the neighborhood of $65. Not sure if that included shipping or not.

--- In SS-40@yahoogroups.com, "w7utp" <w7utp@...> wrote:
>
> I must be missing it for sure but I can't seem to fine the cost of this beautiful little radio, can some one send me an email. thanks in advance Bob w7utp
>

# 574. Low Cost Sub for LT1253

Yahoo group: SS-40
Date: 2013-04-10 15:59:48 UTC
From: Tom
Topic: 569  Message: 574

If you don't mind SMD SOIC-8 parts , Mouser sells a very inexpensive rail-to-rail 260mhz amplifier - $0.69 each. This is significantly less than the $5 cost of the LT1253 part. They can be soldered to a SO8-DIP8 adaptor and used like 8 pin dips...

Rail to Rail AMP 145V/us
CLC2005ISO8X 939-CLC2005ISO8X

# 575. RE: [SS-40] Low Cost Sub for LT1253

Yahoo group: SS-40
Date: 2013-04-10 16:31:06 UTC
From: Gene Dorcas
Topic: 569  Message: 575

What's the part number???

Gene, W5DOR

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Tom
Sent: Wednesday, April 10, 2013 11:00 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] Low Cost Sub for LT1253

If you don't mind SMD SOIC-8 parts , Mouser sells a very inexpensive rail-to-rail 260mhz amplifier - $0.69 each. This is significantly less than the $5 cost of the LT1253 part. They can be soldered to a SO8-DIP8 adaptor and used like 8 pin dips...

Rail to Rail AMP 145V/us
CLC2005ISO8X 939-CLC2005ISO8X

# 576. RE: [SS-40] Low Cost Sub for LT1253

Yahoo group: SS-40
Date: 2013-04-10 18:06:33 UTC
From: Gene Dorcas
Topic: 569  Message: 576

Never mind. I see it now. Under CLC2005

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Gene Dorcas
Sent: Wednesday, April 10, 2013 11:31 AM
To: SS-40@yahoogroups.com
Subject: RE: [SS-40] Low Cost Sub for LT1253

What's the part number???

Gene, W5DOR

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Tom
Sent: Wednesday, April 10, 2013 11:00 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] Low Cost Sub for LT1253

If you don't mind SMD SOIC-8 parts , Mouser sells a very inexpensive rail-to-rail 260mhz amplifier - $0.69 each. This is significantly less than the $5 cost of the LT1253 part. They can be soldered to a SO8-DIP8 adaptor and used like 8 pin dips...

Rail to Rail AMP 145V/us
CLC2005ISO8X 939-CLC2005ISO8X

# 577. Want to use a digital dial on the SS

Yahoo group: SS-40
Date: 2013-05-04 19:59:02 UTC
From: PaulS
Topic: 577  Message: 577

First, I do not know enough about anything but I would like to put a ddial on my SS. I read old posts and tried a wire around the leg of T1. I got a reading but not sure what. I also read something about the emitter of Q8 through a capacitor. Any thoughts de Paul N0NBD

# 578. Re: [SS-40] Want to use a digital dial on the SS

Yahoo group: SS-40
Date: 2013-05-04 23:01:41 UTC
From: Jim Kortge
Topic: 577  Message: 578

On 5/4/2013 3:59 PM, PaulS wrote:
> First, I do not know enough about anything but I would like to put a ddial on my SS. I read old posts and tried a wire around the leg of T1. I got a reading but not sure what. I also read something about the emitter of Q8 through a capacitor. Any thoughts de Paul N0NBD

Paul,

What kind of frequency readout are you thinking of using? The "hot" end of R38 is a good location, as the VXO signal there is constant regardless of the setting of TR2. On my SS-40 receiver, I measure about 1.0 volt P-P on a good scope with at 10X probe. I should think that a 4.7 pF coupling capacitor off of R38 should work quite well into most frequency readouts. If too much signal, add some resistance in series with the input of the frequency readout. BTW, R38 is the location that the signal is taken from for the input to the SS-40 Tx Strip. That's done with a 2.2 pF capacitor feeding a 10K resistor into the input (1.5K impedance) of an SA602 mixer. Works great!

72 and have fun,

Jim, K8IQY

# 579. Re: Want to use a digital dial on the SS

Yahoo group: SS-40
Date: 2013-05-05 15:00:14 UTC
From: Jerry AA6KI
Topic: 577  Message: 579

Hi Jim,

Again you tantalize us. I've seen you mention the SS-40 transmitter elsewhere -- obliquely, of course! :)

Is it a forthcoming product? Might it be built upon one of the UB's (Utility Boards), which are still in the wind? These Platonic projects drive me nuts, you know. :)

Regards,

Jerry AA6KI
Tucson

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 5/4/2013 3:59 PM, PaulS wrote:
> > First, I do not know enough about anything but I would like to put a ddial on my SS. I read old posts and tried a wire around the leg of T1. I got a reading but not sure what. I also read something about the emitter of Q8 through a capacitor. Any thoughts de Paul N0NBD
>
> Paul,
>
> What kind of frequency readout are you thinking of using? The "hot"
> end of R38 is a good location, as the VXO signal there is constant
> regardless of the setting of TR2. On my SS-40 receiver, I measure
> about 1.0 volt P-P on a good scope with at 10X probe. I should think
> that a 4.7 pF coupling capacitor off of R38 should work quite well
> into most frequency readouts. If too much signal, add some resistance
> in series with the input of the frequency readout. BTW, R38 is the
> location that the signal is taken from for the input to the SS-40 Tx
> Strip. That's done with a 2.2 pF capacitor feeding a 10K resistor
> into the input (1.5K impedance) of an SA602 mixer. Works great!
>
> 72 and have fun,
>
> Jim, K8IQY
>

# 580. Re: [SS-40] Re: Want to use a digital dial on the SS

Yahoo group: SS-40
Date: 2013-05-05 16:13:34 UTC
From: WA0ITP
Topic: 577  Message: 580

GM Jerry, I'll answer for the Four State side of the project.

Yes, it in the works for the future, i.e. sometime after Dayton. Jim has designed and built a prototype and it has performed perfectly. He's made some contacts with it, and has used to check into the Four State 40M net. But don't be in a big hurry, there's still a ways to go yet before the kit is ready. Before a kit can be introduced, there is much, much work that has to be done that has little to do with the design itself.

---
I love this radio stuff !
72 WA?ITP
www.wa0itp.com
www.4sqrp.com

----- Original Message -----
From: "Jerry AA6KI" <jpalsson@...>
To: <SS-40@yahoogroups.com>
Sent: Sunday, May 05, 2013 10:00 AM
Subject: [SS-40] Re: Want to use a digital dial on the SS

| Hi Jim,
|
| Again you tantalize us. I've seen you mention the SS-40 transmitter elsewhere -- obliquely, of course! :)
|
| Is it a forthcoming product? Might it be built upon one of the UB's (Utility Boards), which are still in the wind? These Platonic projects drive me nuts, you know. :)
|
| Regards,
|
| Jerry AA6KI
| Tucson
|
| --- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
| >
| > On 5/4/2013 3:59 PM, PaulS wrote:
| > > First, I do not know enough about anything but I would like to put a ddial on my SS. I read old posts and tried a wire around the leg of T1. I got a reading but not sure what. I also read something about the emitter of Q8 through a capacitor. Any thoughts de Paul N0NBD
| >
| > Paul,
| >
| > What kind of frequency readout are you thinking of using? The "hot"

```
| > end of R38 is a good location, as the VXO signal there is constant
| > regardless of the setting of TR2. On my SS-40 receiver, I measure
| > about 1.0 volt P-P on a good scope with at 10X probe. I should think
| > that a 4.7 pF coupling capacitor off of R38 should work quite well
| > into most frequency readouts. If too much signal, add some resistance
| > in series with the input of the frequency readout. BTW, R38 is the
| > location that the signal is taken from for the input to the SS-40 Tx
| > Strip. That's done with a 2.2 pF capacitor feeding a 10K resistor
| > into the input (1.5K impedance) of an SA602 mixer. Works great!
| >
| > 72 and have fun,
| >
| > Jim, K8IQY
| >
|
|
|
|
| ------------------------------------
|
| Yahoo! Groups Links
|
|
|
```

# 581. Re: [SS-40] Re: Want to use a digital dial on the SS

Yahoo group: SS-40
Date: 2013-05-05 17:32:02 UTC
From: Jim Kortge
Topic: 577  Message: 581
Attachments: 2 described; binary payloads are missing from this source WARC

On 5/5/2013 11:00 AM, Jerry AA6KI wrote:
> Hi Jim,

Hi Jerry,

>
> Again you tantalize us.

Part of the fun! :-)

I've seen you mention the SS-40 transmitter elsewhere -- obliquely,
of course! :)

Somewhat obliquely anyway.

>
> Is it a forthcoming product?

I hope that will be the outcome. Lots of new kits in the pipeline,
but we still need to figure out the logistics and find folks to kit them.

Might it be built upon one of the UB's (Utility Boards),

The prototype was indeed built upon a UB2 board, the one that has room
for an RF Driver and Final Amplifier. I've attached a photo of it for
you to see. That worked so well, I did the PCB for it and got some
made to allow me to build a prototype of that version. It also works
very well. A photo of that mounted above my SS-40 on 7.122 MHz part
of the band is also included.

which are still in the wind?

Yes, those will be offered at some point. At first I was thinking we
should supply some basic parts for those two "Designer's Dream (sm)"
boards, but I gave 4 sets to Terry for door prizes at Ozarkcon and the
guys and gals that got them were overjoyed to have them, even without
any parts. That has me thinking again about how to kit them. Sure is
a lot easier to just offer the boards and let those who want them
source their own parts.

These Platonic projects drive me nuts, you know. :)

Your comment makes me laugh! If we get to the point of a pilot build
of the SS-40 Tx Strip, I'll ping you to see if you are interested.
The main goal would be to assure that Assembly Manual is complete and
useable.

>
> Regards,

Thanks for the email Jerry. Always nice to chat with you.

72,

Jim,K8IQY

# 582. RE: [SS-40] Re: Want to use a digital dial on the SS

Yahoo group: SS-40
Date: 2013-05-05 18:22:42 UTC
From: Gene Dorcas
Topic: 577  Message: 582

Oh thanks Jim. Now we're all drooling at the mouth for one of the SS-40 transmitters but can't get one for a few months. Is this going to be integrated with the SS-40 receiver yielding a complete 40m transceiver? Looks like it from the pix. Will the receiver have RIT? Will it work as a complete QRK rig like as if it incorporated the Magic Box? I guess I'm wishing for a lot but we're all anxious to see it. Will it be shown at Dayton? How's that for pressure? ;-)

I think the N3ZI DDS2 has provisions for RIT. I guess I could modify my SS-40 to use the DDS2 as the LO and have a complete transceiver with RIT. In addition to building homebrew stuff I also like CW DX so being able to operate "split" is a must.

I for one and I'm sure many more would be satisfied with just a board. We can source the parts from our junk box.

Thanks for all the excitement!!!

Gene, W5DOR

gene@...

www.w5dor.com

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Jim Kortge
Sent: Sunday, May 05, 2013 12:32 PM
To: SS-40@yahoogroups.com
Subject: Re: [SS-40] Re: Want to use a digital dial on the SS

On 5/5/2013 11:00 AM, Jerry AA6KI wrote:
> Hi Jim,

Hi Jerry,

>
> Again you tantalize us.

Part of the fun! :-)

I've seen you mention the SS-40 transmitter elsewhere -- obliquely, of course! :)

Somewhat obliquely anyway.

>
> Is it a forthcoming product?

I hope that will be the outcome. Lots of new kits in the pipeline, but we still need to figure out the logistics and find folks to kit them.

Might it be built upon one of the UB's (Utility Boards),

The prototype was indeed built upon a UB2 board, the one that has room for an RF Driver and Final Amplifier. I've attached a photo of it for you to see. That worked so well, I did the PCB for it and got some made to allow me to build a prototype of that version. It also works very well. A photo of that mounted above my SS-40 on 7.122 MHz part of the band is also included.

which are still in the wind?

Yes, those will be offered at some point. At first I was thinking we should supply some basic parts for those two "Designer's Dream (sm)" boards, but I gave 4 sets to Terry for door prizes at Ozarkcon and the guys and gals that got them were overjoyed to have them, even without any parts. That has me thinking again about how to kit them. Sure is a lot easier to just offer the boards and let those who want them source their own parts.

These Platonic projects drive me nuts, you know. :)

Your comment makes me laugh! If we get to the point of a pilot build of the SS-40 Tx Strip, I'll ping you to see if you are interested. The main goal would be to assure that Assembly Manual is complete and useable.

>
> Regards,

Thanks for the email Jerry. Always nice to chat with you.

72,

Jim,K8IQY

# 583. Re: [SS-40] Re: Want to use a digital dial on the SS

Yahoo group: SS-40
Date: 2013-05-05 23:58:17 UTC
From: Jim Kortge
Topic: 577 Message: 583

On 5/5/2013 2:22 PM, Gene Dorcas wrote:
>
>
> Oh thanks Jim.

Good evening Gene,

Now we?re all drooling at the mouth for one of the
> SS-40 transmitters but can?t get one for a few months.

Building up demand; its an old marketing move! :-)

Is this going
> to be integrated with the SS-40 receiver yielding a complete 40m
> transceiver?

Yes, indeed that's what it does.

Looks like it from the pix. Will the receiver have RIT?

No, couldn't fit that in.

> Will it work as a complete QRK rig like as if it incorporated the
> Magic Box?

Yes, it does full QSK, since most of what is needed was already in the
SS-40 Receiver, i.e. the input protection and audio muting.

I guess I?m wishing for a lot but we?re all anxious to see
> it. Will it be shown at Dayton? How?s that for pressure? ;-)

Indeed, I'll bring along the prototype built on a "Designer's Dream 2"
board and the real thing on a PCB. I think that's the photo that I
leaked. If not, I'll send it along.

>
> I think the N3ZI DDS2 has provisions for RIT.

I believe that is correct.

I guess I could modify
> my SS-40 to use the DDS2 as the LO and have a complete transceiver
> with RIT.

Yes, or build up a SS-40 Ts Strip and a SAVXO with the same components
as is used in the SS-40 receiver and have independent frequency
control on both the receiver and the transmitter.

In addition to building homebrew stuff I also like CW DX so
> being able to operate ?split? is a must.

See above.
>
> I for one and I?m sure many more would be satisfied with just a board.
> We can source the parts from our junk box.

That's seems to be the consensus of those who have offered an opinion.
Sure makes it a lot easier to supply. We could just sell the
boards, and the buyer could order as many of each kind as he/she
wanted. If we used that approach, those boards are all developed and
ready to go. Would probably need to do a simple write-up on what they
offer, but only a few pages of documentation needed as I see it.
Guess I'd better cc Terry on this reply, so he doesn't miss it.

>
> Thanks for all the excitement!!!

You are welcome Gene. Looking forward to an eyeball at Dayton.

72,

Jim, K8IQY

# 584. Re: [SS-40] Re: Want to use a digital dial on the SS

Yahoo group: SS-40
Date: 2013-05-06 18:11:16 UTC
From: Lee Mairs (SAG)
Topic: 577  Message: 584

I for one think the extra cost involved in sourcing the complete set of parts needed to build a kit is well worth the additional cost. Offer a board only purchase option, but please do not eliminate the "Complete Kit" option.
73 de Lee
KM4YY

On 5/5/2013 7:58 PM, Jim Kortge wrote:
> On 5/5/2013 2:22 PM, Gene Dorcas wrote:
>>
>> Oh thanks Jim.
> Good evening Gene,
>
> Now we?re all drooling at the mouth for one of the
>> SS-40 transmitters but can?t get one for a few months.
> Building up demand; its an old marketing move! :-)
>
> Is this going
>> to be integrated with the SS-40 receiver yielding a complete 40m
>> transceiver?
> Yes, indeed that's what it does.
>
> Looks like it from the pix. Will the receiver have RIT?
>
> No, couldn't fit that in.
>
>> Will it work as a complete QRK rig like as if it incorporated the
>> Magic Box?
> Yes, it does full QSK, since most of what is needed was already in the
> SS-40 Receiver, i.e. the input protection and audio muting.
>
> I guess I?m wishing for a lot but we?re all anxious to see
>> it. Will it be shown at Dayton? How?s that for pressure? ;-)
> Indeed, I'll bring along the prototype built on a "Designer's Dream 2"
> board and the real thing on a PCB. I think that's the photo that I
> leaked. If not, I'll send it along.
>
>> I think the N3ZI DDS2 has provisions for RIT.
> I believe that is correct.
>
> I guess I could modify
>> my SS-40 to use the DDS2 as the LO and have a complete transceiver
>> with RIT.
> Yes, or build up a SS-40 Ts Strip and a SAVXO with the same components
> as is used in the SS-40 receiver and have independent frequency
> control on both the receiver and the transmitter.

>
> In addition to building homebrew stuff I also like CW DX so
>> being able to operate ?split? is a must.
> See above.
>> I for one and I?m sure many more would be satisfied with just a board.
>> We can source the parts from our junk box.
> That's seems to be the consensus of those who have offered an opinion.
> Sure makes it a lot easier to supply. We could just sell the
> boards, and the buyer could order as many of each kind as he/she
> wanted. If we used that approach, those boards are all developed and
> ready to go. Would probably need to do a simple write-up on what they
> offer, but only a few pages of documentation needed as I see it.
> Guess I'd better cc Terry on this reply, so he doesn't miss it.
>
>> Thanks for all the excitement!!!
> You are welcome Gene. Looking forward to an eyeball at Dayton.
>
> 72,
>
> Jim, K8IQY
>
>
>
>
> ---
>
> Yahoo! Groups Links
>
>
>
>
>

# 585. Designer Dream PCBs

Yahoo group: SS-40
Date: 2013-05-07 12:54:23 UTC
From: Jim Kortge
Topic: 577  Message: 585

On 5/6/2013 2:11 PM, Lee Mairs (SAG) wrote:
> I for one think the extra cost involved in sourcing the complete set
> of parts needed to build a kit is well worth the additional cost.
> Offer a board only purchase option, but please do not eliminate the
> "Complete Kit" option.
> 73 de Lee
> KM4YY

Lee,

The "no parts" kits we were talking about are the "Designer Dream" PCBs that let one built almost anything. Sourcing parts for something like that is very difficult if not impossible, since you don't know what the buyer is going to build on it. One doesn't know which parts of circuitry will be used. Beyond that, I perceive that most of the sales would be to folks who like rolling their own designs and have BIG junk boxes of parts, like I do. :-)

72,

Jim, K8IQY

# 586. Re: Want to use a digital dial on the SS

Yahoo group: SS-40
Date: 2013-05-07 19:07:21 UTC
From: Jerry AA6KI
Topic: 577  Message: 586

Thanks for the clarification, Jim ... much appreciated as usual. And yes, I would be interested in participating in a pilot build. But we can cross that bridge when we come to it. If nothing else, I can offer a good critical eye and editorial skills.

Glad to see you've chosen a fancier name for the UB's. "Designer's Dream" is much better.

72,

Jerry AA6KI
Tucson

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 5/5/2013 11:00 AM, Jerry AA6KI wrote:
> > Hi Jim,
>
> Hi Jerry,
>
> >
> > Again you tantalize us.
>
> Part of the fun! :-)
>
> I've seen you mention the SS-40 transmitter elsewhere -- obliquely,
> of course! :)
>
> Somewhat obliquely anyway.
>
> >
> > Is it a forthcoming product?
>
> I hope that will be the outcome. Lots of new kits in the pipeline,
> but we still need to figure out the logistics and find folks to kit them.
>
> Might it be built upon one of the UB's (Utility Boards),
>
> The prototype was indeed built upon a UB2 board, the one that has room
> for an RF Driver and Final Amplifier. I've attached a photo of it for
> you to see. That worked so well, I did the PCB for it and got some
> made to allow me to build a prototype of that version. It also works
> very well. A photo of that mounted above my SS-40 on 7.122 MHz part
> of the band is also included.
>
> which are still in the wind?
>
> Yes, those will be offered at some point. At first I was thinking we

> should supply some basic parts for those two "Designer's Dream (sm)"
> boards, but I gave 4 sets to Terry for door prizes at Ozarkcon and the
> guys and gals that got them were overjoyed to have them, even without
> any parts. That has me thinking again about how to kit them. Sure is
> a lot easier to just offer the boards and let those who want them
> source their own parts.
>
> These Platonic projects drive me nuts, you know. :)
>
> Your comment makes me laugh! If we get to the point of a pilot build
> of the SS-40 Tx Strip, I'll ping you to see if you are interested.
> The main goal would be to assure that Assembly Manual is complete and
> useable.
>
> >
> > Regards,
>
> Thanks for the email Jerry. Always nice to chat with you.
>
> 72,
>
> Jim,K8IQY
>

# 587. Re: Want to use a digital dial on the SS

Yahoo group: SS-40
Date: 2013-05-07 19:31:31 UTC
From: Jerry AA6KI
Topic: 577  Message: 587

Hi Terry,

Thanks for the update. I can only guess how much work goes on behind the scenes in producing a kit -- especially sophisticated designs like Jim's. None of us on the consumer side should take it for granted.

I'd like to volunteer to help in any way I can, whether it's with this kit or another in the future. Let me know (when you're less busy, after Dayton) how I can help.

Regards,

Jerry AA6KI
Tucson

--- In SS-40@yahoogroups.com, "WA0ITP" <wa0itp@...> wrote:
>
> GM Jerry, I'll answer for the Four State side of the project.
>
> Yes, it in the works for the future, i.e. sometime after Dayton. Jim has
> designed and built a prototype and it has performed perfectly. He's made some
> contacts with it, and has used to check into the Four State 40M net. But don't
> be in a big hurry, there's still a ways to go yet before the kit is ready.
> Before a kit can be introduced, there is much, much work that has to be done
> that has little to do with the design itself.
>
> ----------
> I love this radio stuff !
> 72 WAØITP
> www.wa0itp.com
> www.4sqrp.com
>
>
>
>
> ----- Original Message -----
> From: "Jerry AA6KI" <jpalsson@...>
> To: <SS-40@yahoogroups.com>
> Sent: Sunday, May 05, 2013 10:00 AM
> Subject: [SS-40] Re: Want to use a digital dial on the SS
>
>
> | Hi Jim,
> |
> | Again you tantalize us. I've seen you mention the SS-40 transmitter
> elsewhere -- obliquely, of course! :)
> |

> | Is it a forthcoming product? Might it be built upon one of the UB's (Utility
> Boards), which are still in the wind? These Platonic projects drive me nuts,
> you know. :)
> |
> | Regards,
> |
> | Jerry AA6KI
> | Tucson
> |
> | --- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@> wrote:
> | >
> | > On 5/4/2013 3:59 PM, PaulS wrote:
> | > > First, I do not know enough about anything but I would like to put a ddial
> on my SS. I read old posts and tried a wire around the leg of T1. I got a
> reading but not sure what. I also read something about the emitter of Q8
> through a capacitor. Any thoughts de Paul N0NBD
> | >
> | > Paul,
> | >
> | > What kind of frequency readout are you thinking of using? The "hot"
> | > end of R38 is a good location, as the VXO signal there is constant
> | > regardless of the setting of TR2. On my SS-40 receiver, I measure
> | > about 1.0 volt P-P on a good scope with at 10X probe. I should think
> | > that a 4.7 pF coupling capacitor off of R38 should work quite well
> | > into most frequency readouts. If too much signal, add some resistance
> | > in series with the input of the frequency readout. BTW, R38 is the
> | > location that the signal is taken from for the input to the SS-40 Tx
> | > Strip. That's done with a 2.2 pF capacitor feeding a 10K resistor
> | > into the input (1.5K impedance) of an SA602 mixer. Works great!
> | >
> | > 72 and have fun,
> | >
> | > Jim, K8IQY
> | >
> |
> |
> |
> |
> | ------------------------------------
> |
> | Yahoo! Groups Links
> |
> |
> |
>

# 588. RE: [SS-40] Designer Dream PCBs

Yahoo group: SS-40
Date: 2013-05-07 23:17:16 UTC
From: Gene Dorcas
Topic: 577  Message: 588

I'm already "DREAMING" of what I could put on the "Designer Dream" board. Do we have to wait 'til after Dayton?

I'm already gathering parts from my "junk box" and drawing a schematic. If I can't get one I may just start the project without the board. Looking at the board I can tell what most of it is. Will u publish a schematic sometime???

Yeh. I know. I'm jumping the gun but am anxious to get started.

And why do we still call it our "junk box" after all these years when it's so valuable? ;-) I still have some parts from years ago that are now hard to find in case ya ever need something just ask. Such as 40673.etc.

73,

Gene, W5DOR

<mailto:gene@...> gene@...

<http://www.w5dor.com> www.w5dor.com

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Jim Kortge
Sent: Tuesday, May 07, 2013 7:54 AM
To: Lee Mairs (SAG)
Cc: SS-40@yahoogroups.com
Subject: [SS-40] Designer Dream PCBs

On 5/6/2013 2:11 PM, Lee Mairs (SAG) wrote:
> I for one think the extra cost involved in sourcing the complete set
> of parts needed to build a kit is well worth the additional cost.
> Offer a board only purchase option, but please do not eliminate the
> "Complete Kit" option.
> 73 de Lee
> KM4YY

Lee,

The "no parts" kits we were talking about are the "Designer Dream" PCBs that let one built almost anything. Sourcing parts for something like that is very difficult if not impossible, since you don't know what the buyer is going to build on it. One doesn't know which parts of circuitry will be used. Beyond that, I perceive that most of the sales would be to folks who like rolling their own designs and have BIG junk boxes of parts, like I do. :-)

72,

Jim, K8IQY

# 589. Re: [SS-40] Designer Dream PCBs

Yahoo group: SS-40
Date: 2013-05-08 14:53:47 UTC
From: Jim Kortge
Topic: 577  Message: 589
Attachments: 5 described; binary payloads are missing from this source WARC

On 5/7/2013 7:17 PM, Gene Dorcas wrote:
>
>
> I?m already ?DREAMING? of what I could put on the ?Designer Dream?
> board. Do we have to wait ?til after Dayton?

Realistically, yes.
>
> I?m already gathering parts from my ?junk box? and drawing a
> schematic. If I can?t get one I may just start the project without
> the board. Looking at the board I can tell what most of it is. Will
> u publish a schematic sometime???

I've attached them to this reply, along with a block diagram of the
17-Meter to 40-Meter Receive Converter that I built sometime ago on a
Designer Dream #1 PCB
>
> Yeh. I know. I?m jumping the gun but am anxious to get started.

I love your enthusiasm Gene. I hope others will follow suite.

>
> And why do we still call it our ?junk box? after all these years when
> it?s so valuable? ;-)

Agreed, I don't get that. Mine isn't junk at all, but gobs of
carefully selected parts that make designing and building loads of fun.

I still have some parts from years ago that
> are now hard to find in case ya ever need something just ask. Such
> as 40673?etc?

Me too. Probably will never use them in a design for reproduction,
but still useful to have to testing out new ideas or extending ones
knowledge of how things work.
>
> 73,

72 Gene and enjoy the schematics and the like,

Jim, K8IQY

# 590. SS-40 Changes

Yahoo group: SS-40
Date: 2011-09-28 07:07:13 UTC
From: Don Goffinet
Topic: 590  Message: 590

Hello group
I have my SS-40 about half finished or so. The SS-40 is a very good receiver for the price. As for parts, I am missing 2 47pf and 4 .01 capacitors, but I have 3 extra of other capacitors. They will be easy to find, no other parts missing yet, but I have not installed or counted the resistors yet.
For the next version, I would like to have all of the controls and jacks moved off of the board. That way I could have them on the front or back and no problems with hole alignments. I would like to see an audio filter added if there is room on the board and maybe a digital LO.
I work as an electronics technician and have build many kits and even built my own homebrew receiver for 60 KHz WWVB and decoded the time/date with a VIC-20 computer. That was before all of the cheap WWVB clocks that are sold now.
73 Don KE8DO

# 591. RE: [SS-40] SS-40 Changes

Yahoo group: SS-40
Date: 2013-05-22 20:13:15 UTC
From: Gene Dorcas
Topic: 590  Message: 591

I assume you're going to use the SS-40 for CW so you might consider using a 4SQRP group filter. It's 200hz audio filter with no ringing.
http://www.4sqrp.com/HiPerMite.php

When you go to that page scroll down to find a video by Dave, AA7EE. You can see/hear how well it works.

Gene W5DOR

gene@...

www.w5dor.com

From: SS-40@yahoogroups.com [mailto:SS-40@yahoogroups.com] On Behalf Of Don Goffinet
Sent: Wednesday, September 28, 2011 2:07 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] SS-40 Changes

Hello group

I have my SS-40 about half finished or so. The SS-40 is a very good receiver for the price. As for parts, I am missing 2 47pf and 4 .01 capacitors, but I have 3 extra of other capacitors. They will be easy to find, no other parts missing yet, but I have not installed or counted the resistors yet.

For the next version, I would like to have all of the controls and jacks moved off of the board. That way I could have them on the front or back and no problems with hole alignments. I would like to see an audio filter added if there is room on the board and maybe a digital LO.

I work as an electronics technician and have build many kits and even built my own homebrew receiver for 60 KHz WWVB and decoded the time/date with a VIC-20 computer. That was before all of the cheap WWVB clocks that are sold now.

73 Don KE8DO

# 592. Two Questions Re: SS-40 Design

Yahoo group: SS-40
Date: 2013-07-25 17:41:10 UTC
From: Bob L
Topic: 592  Message: 592

Jim--

I have been comparing the SS-40 with earlier 2N2 designs. I do so to try to see how your design philosophy has progressed over time. I have two questions:

The 2N2 used a two crystal roofing filter following the IF amp. Have there been any performance compromises by leaving this out of the SS-40?

I never considered using an SA612 in a high performance receiver. But I was always thinking in terms of a mixer and not a product detector. Are there any concerns in using a 602/612 as a product detector?

# 593. Re: [SS-40] Two Questions Re: SS-40 Design

Yahoo group: SS-40
Date: 2013-07-30 20:09:36 UTC
From: Jim Kortge
Topic: 592  Message: 593

On 7/25/2013 1:41 PM, Bob L wrote:
> Jim--

Hello Bob,

Sorry for the long delay in answering. I've been off on vacation.

>
> I have been comparing the SS-40 with earlier 2N2 designs. I do so to try to see how your design philosophy has progressed over time. I have two questions:
>
> The 2N2 used a two crystal roofing filter following the IF amp.

Yes, the later 20 meter version that also became the template for the 2N2/XX series of rigs kitted by NorCal had the extra filter after the IF to reduce the broadband noise from that stage. If you short it out in one of those rigs, you can certainly hear the difference it makes.

Have there been any performance compromises by leaving this out of the SS-40?

Probably a bit, but the SS-40 uses a different somewhat different approach in that it uses a bunch of ICs (more noise) and not discrete components. It was designed as a very low cost receiver, with performance being a secondary issue That said, the IF amplifier is a low noise device and seems to work well with the way it was configured.
>
> I never considered using an SA612 in a high performance receiver.

I'm not sure that I would either, but the SS-40 wasn't designed as a high performance receiver. There were many design compromises that would take it out of that category. But, it is a very good receiver considering the cost. The SA612 chip has a limited dynamic range and can be easily overloaded if one doesn't have a method of controlling the signal levels to it. The SS-40 uses a J310 FET variable amplifier/attenuator in the front-end to control signal levels in the receiver. Seems to do the job!

But I was always thinking in terms of a mixer and not a product detector. Are there any concerns in using a 602/612 as a product detector?

Yes. See comments above. They apply to either using it as a main mixer or product detector.

72 and thanks for the questions,

Jim, K8IQY

# 594. Two Questions Re: SS-40 Design

Yahoo group: SS-40
Date: 2013-07-30 21:57:47 UTC
From: Bob L
Topic: 592  Message: 594

So I was mistaken in my conclusions. I had concluded the 2Nxxx series had been updated with the use of an opamp IF amp and a 612 product detector to achieve similar performance in the SS-40.

In fact, the SS-40 was a design, simplified for production purposes.

So better performing simple superhets are designed using discrete components.

This helps explain why, in the age of integrated circuits, HF radio experimenters are still creating circuits from individual transistors.

Thanks for the feedback.

Bob, N7SUR

--- In SS-40@yahoogroups.com, Jim Kortge <jim.k8iqy@...> wrote:
>
> On 7/25/2013 1:41 PM, Bob L wrote:
> > Jim--
>
> Hello Bob,
>
> Sorry for the long delay in answering. I've been off on vacation.
>
> >
> > I have been comparing the SS-40 with earlier 2N2 designs. I do so to try to see how your design philosophy has progressed over time. I have two questions:
> >
> > The 2N2 used a two crystal roofing filter following the IF amp.
>
> Yes, the later 20 meter version that also became the template for the
> 2N2/XX series of rigs kitted by NorCal had the extra filter after the
> IF to reduce the broadband noise from that stage. If you short it out
> in one of those rigs, you can certainly hear the difference it makes.
>
> Have there been any performance compromises by leaving this out of
> the SS-40?
>
> Probably a bit, but the SS-40 uses a different somewhat different
> approach in that it uses a bunch of ICs (more noise) and not discrete
> components. It was designed as a very low cost receiver, with
> performance being a secondary issue That said, the IF amplifier is a
> low noise device and seems to work well with the way it was configured.
> >
> > I never considered using an SA612 in a high performance receiver.
>

> I'm not sure that I would either, but the SS-40 wasn't designed as a
> high performance receiver. There were many design compromises that
> would take it out of that category. But, it is a very good receiver
> considering the cost. The SA612 chip has a limited dynamic range and
> can be easily overloaded if one doesn't have a method of controlling
> the signal levels to it. The SS-40 uses a J310 FET variable
> amplifier/attenuator in the front-end to control signal levels in the
> receiver. Seems to do the job!
>
> But I was always thinking in terms of a mixer and not a product
> detector. Are there any concerns in using a 602/612 as a product
> detector?
>
> Yes. See comments above. They apply to either using it as a main
> mixer or product detector.
>
> 72 and thanks for the questions,
>
> Jim, K8IQY
>

# 595. Re: [4sqrp] SS-40 AGC Problem

Yahoo group: SS-40
Date: 2013-09-20 23:50:46 UTC
From: Jim Kortge
Topic: 595  Message: 595

On 9/20/2013 4:00 PM, morgamp52@... wrote:

Hi Mike,

Sorry to hear you are having issues with your SS-40 Receiver.

>
>
> My SS-40 receiver will not calibrate the AGC voltage. In fact the
> collector voltage on Q6 remains constant at 1.415 volts, no matter
> what I do with TR-1 adjustment pot.

That would suggest you are not getting enough signal through the system to generate sufficient audio to produce some AGC control. In that mode, the front-end of the receiver is running wide open, and has that most sensitivity that it can have. Note this last statement.

I have checked both the pot and
> Q6 with no luck.

My first guess is some kind of alignment issue, either with the front-end of the receiver or the LO offset isn't correct so that the IF is centered in the crystal filter. Either can cause significant signal degradation.
>
> Receiver operates OK, although a tad deaf compared to design specs.

I disagree with the above statement. My guess is that the receiver is very deaf compared to what it will be if it is operating correctly.

Could you send along clear digital photos of both sides of the PCB. Maybe we can collectively see something amiss with the construction. If not, then we need to go into detailed mode and make sure that the alignment is correct.

72,

Jim, K8IQY

# 596. Re: [4sqrp] SS-40 AGC Problem

Yahoo group: SS-40
Date: 2013-10-01 23:40:36 UTC
From: Jim Kortge
Topic: 595  Message: 596

On 10/1/2013 6:57 PM, Mike wrote:
> Hi Jim..

Hi Mike,

Sorry to hear about your dad in the last email. Sure tough losing a parent. Been there....

> Making some headway. I thought before I sent you pictures, I had best
> double check the front end just to save myself some embarrassment!
> Sure enough, L-1 was not wound correctly and once fixed, the
> sensitivity went way up. I can now copy a 1uv (-107dbm) signal very
> easily.

If 1 uV is easy to hear in the receiver, it has to be at least close to being right. Do all of the front-end trimmers peak somewhere in the middle of their range? If so, everything is probably just fine.

I don't have a sig generator that goes down to -132 dbm, so
> don't know if it would do well just above that level. It is pulling
> in sigs that I have never been able to hear before.

That certainly sounds encouraging.

> The AGC is operating, but not per specification. With no signal, I
> can't adjust below about 1.400 volts DC on C-43.

There is so little noise in the receiver, adjusting TR1 doesn't do anything under that condition.

With no antenna on the input, the nominal idle voltage at of the AGC system is 1.4 volts. That has the SA612 and the input amplifier, Q1, running wide open, as they should be doing under those conditions. With an antenna connected, depending on how much noise you are hearing, setting the AGC pot, TR1 might reduce that value some or a lot, if you have a lot of antenna noise pickup and everything is peaked.

With a strong
> signal, it will drop to 0.85 to 0.9 volts DC.

OK, that's about as low as it will go. On my receiver, I have 1.42 volts with no antenna. TR1 is adjusted so that with the antenna on and not tuned to a signal, I see about 1.20 to 1.25 volts and it wanders around a bit as the noise levels change due to atmospherics. Under those conditions, some AGC is being applied to the RF amp and the SA612 mixer.

I can adjust TR-1 and
> get popping or not on strong signals.

That's what should be happening. You adjust TR1 so that the popping is minimized for the best audio.

So the question now is: Should
> I be happy with what I have, or do we need to do more
> troubleshooting???

I think you have it working if the above questions about the front-end trim caps is a "yes".

Where should I look next?

No where as far as I can tell. Play with it a bit and see if you are satisfied with what you are hearing and how the receiver sounds. Make sure that you have the LO adjusted so that the signal tone is what you like and is centered in the filter pass band. On a steady carrier, you can tune across the signal while measuring the audio output voltage with a VOM. If the audio voltage peak is at the audio receive frequency that you like to listen to, you have the LO set correctly.
>
> Mike n0mpm

Let me know how it goes, but, I think you have it working just fine.

72,

Jim, K8IQY

# 597. Coaxial power connector size....

Yahoo group: SS-40
Date: 2013-11-12 13:25:46 UTC
From: Stephen Farthing
Topic: 597  Message: 597

Hi everyone,

Can someone tell me the correct size for the coaxial power connector plug on the SS40.
Is it by chance a non metric part? I have a shed load of the buggers here but nothing seems to fit....I am sure I had one once when I tested it but I think the underpants gnomes stole if when I wasn't looking....

73s Steve G0XAR

# 598. Re: [SS-40] Coaxial power connector size....

Yahoo group: SS-40
Date: 2013-11-12 14:09:18 UTC
From: Jim Kortge
Topic: 597  Message: 598

On 11/12/2013 8:25 AM, Stephen Farthing wrote:
>
>
> Hi everyone,

Greetings Steve,

>
> Can someone tell me the correct size for the coaxial power connector
> plug on the SS40.

5.5 mm OD and 2.5 mm ID. A standard plug size here in the USA.

> Is it by chance a non metric part?

No, it is metric.

I have a shed load of the buggers
> here but nothing seems to fit....I am sure I had one once when I
> tested it but I think the underpants gnomes stole if when I wasn't
> looking....

That can happen! :-)

72 and GL,

Jim, K8IQY

# 599. next run of SS40 available?

Yahoo group: SS-40
Date: 2014-03-25 15:56:16 UTC
From: <bosonob2000@...>
Topic: 599  Message: 599

This maybe a question that comes up alot, so my apologies. Is there an estimate of when the next kitting run might happen? I waited too long it seems before realising the demand and supply of the last batch.

Tnx es 73s
KF4UEO
Stefan

# 600. Re: [SS-40] next run of SS40 available?

Yahoo group: SS-40
Date: 2014-03-25 17:03:36 UTC
From: Johnny Matlock
Topic: 599  Message: 600

Gm Stefan
We are kiting up a new run currently.
They should be released about the 1 st of April.
Also we have a new Tx 40 strip kit to make it a full blown transciever.
Thanks for you intrest
72
Johnny AC0BQ
On Tuesday, March 25, 2014, <bosonob2000@...> wrote:

>
>
> This maybe a question that comes up alot, so my apologies. Is there an
> estimate of when the next kitting run might happen? I waited too long it
> seems before realising the demand and supply of the last batch.
>
>
>
> Tnx es 73s
>
> KF4UEO
>
> Stefan
>
>
>

--
QRP....."more smiles per watt"
72
JOHNNY AC0BQ ..

# 601. SS40 receiver specs

Yahoo group: SS-40
Date: 2014-04-04 01:04:39 UTC
From: <bosonob2000@...>
Topic: 601  Message: 601

While I wait for my new ss40ht kit, I thought I would ask the group has anybody measured the BDR, IP2, IP3 intercept etc? Looking at the schematic and having followed Norcal designs over the years including Wayne Burdick's excellent rigs wilderness sierra and Norcal 40a. These were dual NE602 designs but with excellent attention to the impedance and circuit gain stages can deliver greater than 90db of dynamic range with very good signal-to-noise, IP3 intercept etc. Now with the SS40 using a strong first mixer it I can't imagine how bulletproof this little rig is:)

Btw I intend on doing the Sierra ABX mod for fun. I like variable BW. Anybody else try this?

Any thoughts, numbers?

73's

KF4UEO
Stefan

# 602. SS40 Crystal Switch

Yahoo group: SS-40
Date: 2014-05-26 22:47:37 UTC
From: Johnny Matlock
Topic: 602  Message: 602
Attachments: 2 described; binary payloads are missing from this source WARC

I hope this helps explain how I hooked up my High, Low crystal switch.
I need a drafting program like cad lite, but this is a drawing I cobbled together in Draw.
72
Johnny
--
QRP....."more smiles per watt"
72
JOHNNY AC0BQ ..

# 603. SS-40 HT Build

Yahoo group: SS-40
Date: 2014-06-08 17:51:22 UTC
From: k3asw14297@...
Topic: 603  Message: 603

Just joined group. Built up SS-40 HT, but it's still on two wooden rails until I get it into a case.

Problem with Step 6 - Product detector; SOLVED

Upon running Testing procedure, did not hear hissing sound.
Reason: U2 pin 6 too much voltage: measured 1080 mVp-p with scope (Tek 335). Spec for NE602 states should be 200-300 mV rms, 560-840 mVp-p.

Bridged additional capacitance across C23 to decrease pin 6 voltage;
150 pf gives ~ 480 mV p-p: too little
100 pf 500 : too little
56 pF 680 : within spec. range

Ended up soldering 56pF NP0 across C23 on bottom of board.

For NE602 (and it's variants), it IS critical to have proper voltage for oscillator input. This goes back to days of NorCal NC-40. From my "tweaking" of numerous NE602 product detectors in various kit and other receivers, I've found that it is advisable to measure, and adjust if necessary, the pin 6 and 7 capacitor values to set the oscillator level. If one does not have an oscilloscope, an RF detector probe and DC voltmeter can be used.

Have done some VXO experimentation re: changing tuning range. Will post those results later.

I like it's very quiet audio; filter is fine. Awaiting the Hi-Per-Mite to add that.

Hopefully above info will find its way to K8IQY, and to any others that may have "product detector problems."

Walt K3ASW

# 604. Re: [SS-40] SS-40 HT Build

Yahoo group: SS-40
Date: 2014-06-08 23:47:29 UTC
From: Jim Kortge
Topic: 603  Message: 604

On 6/8/2014 1:51 PM, k3asw14297@... [SS-40] wrote:
>
>
> Just joined group. Built up SS-40 HT, but it's still on two wooden
> rails until I get it into a case.
>
>
> _Problem with Step 6_ - Product detector; SOLVED
>
>
> Upon running Testing procedure, did not hear hissing sound.

Volume has to be near full to hear the hiss.

>
> Reason: U2 pin 6 too much voltage: measured 1080 mVp-p with scope
>
> (Tek 335). Spec for NE602 states should be 200-300 mV rms, 560-840 mVp-p.

Where exactly is that stated. I just reviewed the spec sheet from NXP
and it states that pin 6 needs at least 200 mv rms, but doesn't
provide an upper limit. In the two receivers that I just tested, pin
6 has 325 mv rms on pin 6.
>
>
> Bridged additional capacitance across C23 to decrease pin 6 voltage;

I think you mean D32? C23 is an IF Amp bypass capacitor.

>
> 150 pf gives ~ 480 mV p-p: too little
>
> 100 pf 500 : too little
>
> 56 pF 680 : within spec. range
>
>
> Ended up soldering 56pF NP0 across C23 on bottom of board.

That would infer that C332 should be ~ 180 pF. What were your
findings with the added 56 pF across C32 in terms of product detector
performance?
>
>
> For NE602 (and it's variants), it IS critical to have proper voltage
> for oscillator input. This goes back to days of NorCal NC-40. From my

> "tweaking" of numerous NE602 product detectors in various kit and
> other receivers, I've found that it is advisable to measure, and
> adjust if necessary, the pin 6 and 7 capacitor values to set the
> oscillator level. If one does not have an oscilloscope, an RF detector
> probe and DC voltmeter can be used.

Data to support the above statements?
>
>
> Have done some VXO experimentation re: changing tuning range. Will
> post those results later.

OK, I'm interested in knowing what you found out.
>
>
> I like it's very quiet audio; filter is fine. Awaiting the Hi-Per-Mite
> to add that.
>
>
> Hopefully above info will find its way to K8IQY, and to any others
> that may have "product detector problems."

I haven't had any product detector issues with the several SS-40
receivers that I've built, not has anyone suggested there is an issue
until your post Walt. This all comes as a great surprise to me; I'm
certainly willing to learn more though.
>
>
> Walt K3ASW

72,

Jim, K8IQY

# 605. Debuggin SS-40HT/TX boards

Yahoo group: SS-40
Date: 2014-06-09 15:43:23 UTC
From: jwc123@...
Topic: 605  Message: 605

Greetings all,

I am trying to troubleshoot a SS-40HT w/ TX board. The receiver seems to be working great. However, on the transmit side I can get only a few milliwatts at best. Tracing back it looks like the VXO seems to have low output. I am reading about 250mVp-p on a scope (50mV via RF probe) with TR2 at maximum. This seems be to far less than the receiving testing step 11 shows. Otherwise the VXO seems to be working good (from 16.225 to 16.250) and I am receiving signals. So far a visual shows all parts to be correct and no bad joints, etc. Any ideas where to look from here?

Thanks and 73

John kc9on

# 606. Re: [SS-40] Debuggin SS-40HT/TX boards

Yahoo group: SS-40
Date: 2014-06-09 16:47:38 UTC
From: Jim Kortge
Topic: 605  Message: 606

On 6/9/2014 11:43 AM, jwc123@... [SS-40] wrote:
>
>
> Greetings all,

Hello John,

>
> I am trying to troubleshoot a SS-40HT w/ TX board. The receiver seems
> to be working great. However, on the transmit side I can get only a
> few milliwatts at best.

What were the results of the transmit tests as that unit was being
built? Also, can you provide the same info for the tests of the VXO
during the receiver build?

Tracing back it looks like the VXO seems to
> have low output. I am reading about 250mVp-p on a scope (50mV via RF
> probe) with TR2 at maximum. This seems be to far less than the
> receiving testing step 11 shows. Otherwise the VXO seems to be
> working good (from 16.225 to 16.250) and I am receiving signals. So
> far a visual shows all parts to be correct and no bad joints, etc.

Can you take good, clear digital photos of the component and solder
side of both the receiver and transmit strip and send them along?
That might be helpful.

> Any ideas where to look from here?

Could be anything, including not having enough current capacity in
your power supply to run everything.
>
> Thanks and 73
>
> John kc9on

72,

Jim, K8IQY

# 607. Love My SS-40 :-)

Yahoo group: SS-40
Date: 2014-06-10 14:31:27 UTC
From: marinefabguru@...
Topic: 607  Message: 607

Hey Guys,

I gotta say the SS-40's are the best little receivers in my shack. Apparently
I really like building and using them.. I have THREE of them!

Anybody else?
Pappy
KC5ILR

# 608. Re: Love My SS-40 :-)

Yahoo group: SS-40
Date: 2014-06-11 22:21:59 UTC
From: Johnny Matlock
Topic: 607  Message: 608

Hello Pappy
I agree 100%, I sure like mine!

I sure wish Jim had designed it to work on other bands. (Hint hint)
Johnny AC0BQ

--
QRP....."more smiles per watt"
72
JOHNNY AC0BQ ..

# 609. Re: [SS-40] Re: Love My SS-40 :-)

Yahoo group: SS-40
Date: 2014-06-12 02:05:35 UTC
From: Jim Kortge
Topic: 607  Message: 609

On 6/11/2014 6:21 PM, Johnny Matlock jomatlock@... [SS-40] wrote:
>
>
> Hello Pappy
> I agree 100%, I sure like mine!

Me too! :-)
>
> I sure wish Jim had designed it to work on other bands. (Hint hint)

Well, lets see, I have had one working on 10-Meters for the past 6 or so months, and another one on the bench being built for 30-Meters. Both of those use the VXO for frequency control With a DDS VFO, it will work on any band with suitable changes to the front-end.

Seems quite versatile to me! :-)

72,

Jim, K8IQY

# 610. SS-40HT building glitch

Yahoo group: SS-40
Date: 2014-06-12 23:58:17 UTC
From: jd_compton@...
Topic: 610  Message: 610

Just finished the VXO section of my SS-40HT and I've got two problems that I need to de-bug before I proceed.
1. When I test the voltage with an RF probe at the VXH header, I'm only getting 4.7 volts with TR2 set at mid-range...or max, for that matter. I''m powering the board at 12v. The VXH voltage reading is supposed to be .8 - 1.0 volts. I checked it on two DVMs and get the same reading on both. Throughout the build, I check each resistor before installing it on the board, both for color codes and actual resistance with a meter. Have no idea where to go from here to trouble-shoot the low voltage. I will set it up on an oscilloscope to check for the 2.5 p-p volts using that test method. The one thing I haven't done is calibrate the RF probe, which I just bought (a Fluke probe)...mainly because I don't know how.

2. I am setting the board up for the switchable crystal sets. The above voltage test was done with the 7.030 crystal set. Funny thing is, I get a 0.00 v reading when I have the 7.122 crystal set wired into the board. I've checked and triple checked the wiring, looked for solder bridges, grounds, etc., but I'm confident the wiring is correct. I don't have the DPDT switch in the circuit yet, so I'm using jumpers to connect each crystal set to the appropriate connect point, ie R33 for the low set, C50 for the high set. I have the cases of each crystal set grounded together and connected to the ground point on the board. Is it possible to have a bad crystal(s) in the 7.122 set?

These problems don't seem related, but I need help with each. I've been very careful with the build, but something isn't right with the VXO circuitry.

Any ideas?

Jim Compton K4JDC

# 611. Re: [SS-40] SS-40HT building glitch

Yahoo group: SS-40
Date: 2014-06-13 01:07:17 UTC
From: Jim Kortge
Topic: 610  Message: 611

On 6/12/2014 7:58 PM, jd_compton@... [SS-40] wrote:
>
>
> Just finished the VXO section of my SS-40HT and I've got two problems
> that I need to de-bug before I proceed.
>
> 1. When I test the voltage with an RF probe at the VXH header, I'm
> only getting 4.7 volts with TR2 set at mid-range...or max, for that
> matter.

It should change depending on the TR2 setting. Are you sure you have
the correct trimmer in place for TR2. It should be the 1K trimmer.
Others have used the wrong trimmer and the VXO won't run correctly
with the 10K pot installed at TR2.

4.7 volts is a really high reading at the VXH header. It should be
lower than that, or did you type the wrong value?

I''m powering the board at 12v. The VXH voltage reading is
> supposed to be .8 - 1.0 volts.

That's correct, with a properly terminated RF Probe of know calibration.

I checked it on two DVMs and get the
> same reading on both. Throughout the build, I check each resistor
> before installing it on the board, both for color codes and actual
> resistance with a meter. Have no idea where to go from here to
> trouble-shoot the low voltage. I will set it up on an oscilloscope to
> check for the 2.5 p-p volts using that test method. The one thing I
> haven't done is calibrate the RF probe, which I just bought (a Fluke
> probe)...mainly because I don't know how.

Then maybe it isn't supposed to work with the DVM's that you have or
reads completely wrong since it isn't being used with a Fluke DVM.
>
>
> 2. I am setting the board up for the switchable crystal sets. The
> above voltage test was done with the 7.030 crystal set. Funny thing
> is, I get a 0.00 v reading when I have the 7.122 crystal set wired
> into the board. I've checked and triple checked the wiring, looked
> for solder bridges, grounds, etc., but I'm confident the wiring is
> correct. I don't have the DPDT switch in the circuit yet, so I'm
> using jumpers to connect each crystal set to the appropriate connect
> point, ie R33 for the low set, C50 for the high set.

Where did you get the circuitry for that modification. I've not
tested it so can't comment on how well it works or doesn't work.

I have the cases
> of each crystal set grounded together and connected to the ground
> point on the board. Is it possible to have a bad crystal(s) in the
> 7.122 set?

Yes, but that would be very rare. I'm guessing the problem is
somewhere else. What are the markings on the two sets of crystals
that you have for the VXO? We should start there and make sure you
have the correct units.

>
>
> These problems don't seem related, but I need help with each. I've
> been very careful with the build, but something isn't right with the
> VXO circuitry.

I'd suggest getting the VXO to operate correctly with one crystal set
or the other before expanding the build to include two sets of
crystals and all of the additional connections that are required.
>
>
> Any ideas?

See above,

72,

Jim, K8IQY

# 612. Re: [SS-40] SS-40HT building glitch

Yahoo group: SS-40
Date: 2014-06-13 02:15:51 UTC
From: Jim Compton
Topic: 610  Message: 612

Jim,

Thanks for the response. And, yes, I placed the decimal in the wrong place....the voltage at the VXH header measured .47 volts. And I checked it first with the Fluke RF probe on a Fluke 77 meter.

I will double check the TR2 trimmer pot. I don't have the assembly manual with me right now, but all previous tests were successful and I was thinking that pot was tested in a previous section test.

I believe Johnny Matlock was the one who posted the switchable crystal schematic. I've read a few posts from people who have incorporated it and they seem satisfied. Perhaps I'll remove one set of crystals and do the tests again.

I'll let you know how the test go after I've checked the areas you suggest.

Thanks!

Jim Compton, K4JDC

-----Original Message-----
>From: "Jim Kortge jim.k8iqy@... [SS-40]" <SS-40@yahoogroups.com>
>Sent: Jun 12, 2014 9:07 PM
>To: SS-40@yahoogroups.com
>Subject: Re: [SS-40] SS-40HT building glitch
>
>
>
>On 6/12/2014 7:58 PM, jd_compton@... [SS-40] wrote:
>>
>>
>> Just finished the VXO section of my SS-40HT and I've got two problems
>> that I need to de-bug before I proceed.
>>
>> 1. When I test the voltage with an RF probe at the VXH header, I'm
>> only getting 4.7 volts with TR2 set at mid-range...or max, for that
>> matter.
>
>It should change depending on the TR2 setting. Are you sure you have
>the correct trimmer in place for TR2. It should be the 1K trimmer.
>Others have used the wrong trimmer and the VXO won't run correctly
>with the 10K pot installed at TR2.
>
>4.7 volts is a really high reading at the VXH header. It should be
>lower than that, or did you type the wrong value?
>
> I''m powering the board at 12v. The VXH voltage reading is

>> supposed to be .8 - 1.0 volts.
>
>That's correct, with a properly terminated RF Probe of know calibration.
>
> I checked it on two DVMs and get the
>> same reading on both. Throughout the build, I check each resistor
>> before installing it on the board, both for color codes and actual
>> resistance with a meter. Have no idea where to go from here to
>> trouble-shoot the low voltage. I will set it up on an oscilloscope to
>> check for the 2.5 p-p volts using that test method. The one thing I
>> haven't done is calibrate the RF probe, which I just bought (a Fluke
>> probe)...mainly because I don't know how.
>
>Then maybe it isn't supposed to work with the DVM's that you have or
>reads completely wrong since it isn't being used with a Fluke DVM.
>>
>>
>> 2. I am setting the board up for the switchable crystal sets. The
>> above voltage test was done with the 7.030 crystal set. Funny thing
>> is, I get a 0.00 v reading when I have the 7.122 crystal set wired
>> into the board. I've checked and triple checked the wiring, looked
>> for solder bridges, grounds, etc., but I'm confident the wiring is
>> correct. I don't have the DPDT switch in the circuit yet, so I'm
>> using jumpers to connect each crystal set to the appropriate connect
>> point, ie R33 for the low set, C50 for the high set.
>
>Where did you get the circuitry for that modification. I've not
>tested it so can't comment on how well it works or doesn't work.
>
> I have the cases
>> of each crystal set grounded together and connected to the ground
>> point on the board. Is it possible to have a bad crystal(s) in the
>> 7.122 set?
>
>Yes, but that would be very rare. I'm guessing the problem is
>somewhere else. What are the markings on the two sets of crystals
>that you have for the VXO? We should start there and make sure you
>have the correct units.
>
>>
>>
>> These problems don't seem related, but I need help with each. I've
>> been very careful with the build, but something isn't right with the
>> VXO circuitry.
>
>I'd suggest getting the VXO to operate correctly with one crystal set
>or the other before expanding the build to include two sets of
>crystals and all of the additional connections that are required.
>>
>>

```
>> Any ideas?
>
>See above,
>
>72,
>
>Jim, K8IQY
>
>
>
>------------------------------------
>
>------------------------------------
>
>Yahoo Groups Links
>
>
>
```

# 613. Re: [SS-40] SS-40 HT Build

Yahoo group: SS-40
Date: 2014-06-14 14:55:45 UTC
From: k3asw14297@...
Topic: 603  Message: 613

Jim,

First, I apologize for taking so long to respond; sometimes work gets in the way.

1) When I did the Step 6 testing, the volume control was turned all the way CW (full) when I initially didn't hear the hiss.
2) My previous email stated an incorrect ref designator for the capacitor I was referring to; it is C28, the one from U2 pin 7 to ground.
3) My reference(s) to the correct U2 pin 6 voltage comes from an original Signetics databook I was fortunate enough to recover before they tossed it out at work some ~25 years ago. It contains much more data and information than the present NXP datasheet. I, in fact, had written up a note that appeared in Mike C's (WA8MCQ) "Idea Exchange" column in ARCI QQ, Volume XXXV, October 1997, pp. 25-26; there are 13 references cited in that note. It states that the range for NE602 pin 6 voltage is 200-300 mV rms, with "best mixer performance" at 220 mV rms. My note uses mostly rms voltages as I didn't have an oscilloscope back then; also my call was WA4KAC at that time. [If you don't have a copy of this QQ, send me a postal address and I'll provide a copy of the IDX note.]

Dave Meacham, W6EMD, was the one who noted spurious responses with the NE602's used in the original NC-40 back in those times; he changed the emitter-ground capacitors to larger values to set the voltage on pin 6. This voltage varies according to the device (NE602 data code), capacitance values for C28 and C32 (SS-40 ref designators), and crystal activity. Changing either capacitor will affect the crystal oscillator frequency; a trimmer capacitor helps to get a frequency spot on.

4) I measured 680 mV p-p (240 mv rms) after I added the 56pF across C28 in the SS-40HT. The product detector functioned properly and I then could hear the Step 6 testing hiss, as was stated in the manual.

I'll be forwarding the VXO experimentation information at a later date; right now it written on a sheet of paper attached to the manual.

Thanks to you and the Four State group for providing a fine receiver. (The first station I heard from MD was a KH6 at the Step 12, no front end, testing.)

Regards,
Walt K3ASW

# 614. My poor SS40 receiver!

Yahoo group: SS-40
Date: 2014-06-14 16:49:09 UTC
From: All The Facts
Topic: 603  Message: 614

If it is still ok... I will send the errant receiver to you on Monday. Thank u so much!
72 John NS5Z

Sent from my iPhone

> On Jun 8, 2014, at 6:47 PM, "Jim Kortge jim.k8iqy@... [SS-40]" <SS-40@yahoogroups.com>
wrote:
>
>
>
> On 6/8/2014 1:51 PM, k3asw14297@... [SS-40] wrote:
> >
> >
> > Just joined group. Built up SS-40 HT, but it's still on two wooden
> > rails until I get it into a case.
> >
> >
> > _Problem with Step 6_ - Product detector; SOLVED
> >
> >
> > Upon running Testing procedure, did not hear hissing sound.
>
> Volume has to be near full to hear the hiss.
>
> >
> > Reason: U2 pin 6 too much voltage: measured 1080 mVp-p with scope
> >
> > (Tek 335). Spec for NE602 states should be 200-300 mV rms, 560-840 mVp-p.
>
> Where exactly is that stated. I just reviewed the spec sheet from NXP
> and it states that pin 6 needs at least 200 mv rms, but doesn't
> provide an upper limit. In the two receivers that I just tested, pin
> 6 has 325 mv rms on pin 6.
> >
> >
> > Bridged additional capacitance across C23 to decrease pin 6 voltage;
>
> I think you mean D32? C23 is an IF Amp bypass capacitor.
>
> >
> > 150 pf gives ~ 480 mV p-p: too little
> >
> > 100 pf 500 : too little
> >
> > 56 pF 680 : within spec. range

> >
> >
> > Ended up soldering 56pF NP0 across C23 on bottom of board.
>
> That would infer that C332 should be ~ 180 pF. What were your
> findings with the added 56 pF across C32 in terms of product detector
> performance?
> >
> >
> > For NE602 (and it's variants), it IS critical to have proper voltage
> > for oscillator input. This goes back to days of NorCal NC-40. From my
> > "tweaking" of numerous NE602 product detectors in various kit and
> > other receivers, I've found that it is advisable to measure, and
> > adjust if necessary, the pin 6 and 7 capacitor values to set the
> > oscillator level. If one does not have an oscilloscope, an RF detector
> > probe and DC voltmeter can be used.
>
> Data to support the above statements?
> >
> >
> > Have done some VXO experimentation re: changing tuning range. Will
> > post those results later.
>
> OK, I'm interested in knowing what you found out.
> >
> >
> > I like it's very quiet audio; filter is fine. Awaiting the Hi-Per-Mite
> > to add that.
> >
> >
> > Hopefully above info will find its way to K8IQY, and to any others
> > that may have "product detector problems."
>
> I haven't had any product detector issues with the several SS-40
> receivers that I've built, not has anyone suggested there is an issue
> until your post Walt. This all comes as a great surprise to me; I'm
> certainly willing to learn more though.
> >
> >
> > Walt K3ASW
>
> 72,
>
> Jim, K8IQY
>
>

# 615. Re: SS-40TX Step 4 test failure

Yahoo group: SS-40
Date: 2014-06-22 01:35:33 UTC
From: Jim Kortge
Topic: 615  Message: 615

On 6/21/2014 12:43 PM, Jim Compton wrote:
> Jim,

Hello Jim,

I've been off on vacation, so sorry for the delay in answering.
Learning Bluegrass Fiddle always trumps Ham Radio! :-)

>
> My apologies; I know you're busy, but I'm not sure how to proceed with the build on my SS-40TX.
>
> My Test results so far are as follows:
>
> Step 2 Test: 8.04 V Passed
> Step 3 Test: Applied voltage 12 V, Rt Pad of R9 voltage w/ JP2 pins shorted together: 11.83 V; Diff of .17 V Passed
> Step 4 Test: Rt pad of R7 w/ JP2 pins shorted together: 8.03 V; Should be approximately 7.8 V FAIL

Not correct. You are analyzing the test incorrectly. The voltage
drop can be up to 0.2 volts OR LESS. We just want to make sure that
the regulator is working properly. The only time we might expect a
0.2 volt drop through the regulator is when we are drawing full rated
current, 100 ma. During the test, we are open circuit, with only the
voltmeter being the load, and it is very high Z.
>
> All voltages measured relative to PCB mounting hole as ground.

Good, that's the right way to do it,.

>
> I've verified all component identifications, markings, correct orientation of diodes and transistors and checked all solder joints for any cold solder connections or solder traces between any pins. Everything checks visually.
>
> I don't know the significance of the failed test of Step 4.

It hasn't failed. Keep building!! :-)

I'm not getting the required 0.2 V voltage drop but I don't have a
clue why.

See above.....

>
> Help?

Done.

72 and kind regards,

Jim, K8IQY

# 616. Re: [SS-40] SS-40 HT Build

Yahoo group: SS-40
Date: 2014-06-22 01:47:46 UTC
From: Jim Kortge
Topic: 603  Message: 616

On 6/14/2014 10:55 AM, k3asw14297@... [SS-40] wrote:
>
>
> Jim,

Hi Walt,

Been away and just got home from Bluegrass Music camp.

>
> First, I apologize for taking so long to respond; sometimes work gets
> in the way.

Not a problem.

>
> 1) When I did the Step 6 testing, the volume control was turned all
> the way CW (full) when I initially didn't hear the hiss.

Very interesting that you could not hear any hiss. I've had it on all
of the receivers that I've built so far, but that is a tiny sample of
the 100's that we have shipped.

> 2) My previous email stated an incorrect ref designator for the
> capacitor I was referring to; it is C28, the one from U2 pin 7 to ground.

OK, that makes a lot more sense.

> 3) My reference(s) to the correct U2 pin 6 voltage comes from an
> original Signetics databook I was fortunate enough to recover before
> they tossed it out at work some ~25 years ago. It contains much more
> data and information than the present NXP datasheet. I, in fact, had
> written up a note that appeared in Mike C's (WA8MCQ) "Idea Exchange"
> column in ARCI /QQ/, Volume XXXV, October 1997, pp. 25-26; there are
> 13 references cited in that note. It states that the range for NE602
> pin 6 voltage is 200-300 mV rms, with "best mixer performance" at 220
> mV rms.

I've not seen that information ever. It would be nice if NXP had that
in their current data sheet since you say it will affect mixer
performance. Time for some testing I think here in my lab.

My note uses mostly rms voltages as I didn't have an
> oscilloscope back then; also my call was WA4KAC at that time. [If you
> don't have a copy of this QQ, send me a postal address and I'll
> provide a copy of the IDX note.]

My call book address will work fine. I'd sure like to read about this oscillator level.
>
> Dave Meacham, W6EMD, was the one who noted spurious responses with the
> NE602's used in the original NC-40 back in those times; he changed the
> emitter-ground capacitors to larger values to set the voltage on pin
> 6. This voltage varies according to the device (NE602 data code),

That not very nice.....

> capacitance values for C28 and C32 (SS-40 ref designators),

Yep..

and
> crystal activity.

Always an unknown in the beginning.

> Changing either capacitor will affect the crystal oscillator
> frequency;

Agreed.

a trimmer capacitor helps to get a frequency spot on.

We have that in the oscillator circuit, so OK.

> 4) I measured 680 mV p-p (240 mv rms) after I added the 56pF across
> C28 in the SS-40HT. The product detector functioned properly and I
> then could hear the Step 6 testing hiss, as was stated in the manual.

Time to put an SS-40 on the bench with the LO replaced with my good signal generator and a fixed level signal on the input and vary the LO drive and map the output. Sometime next week I'll do that.

>
> I'll be forwarding the VXO experimentation information at a later
> date; right now it written on a sheet of paper attached to the manual.

OK, no problem, but I'd like to see that too. Might learn a thing or two.

>
> Thanks to you and the Four State group for providing a fine receiver.
> (The first station I heard from MD was a KH6 at the Step 12, no front
> end, testing.)

Good show!
>
> Regards,
> Walt K3ASW

Thanks for the feedback and update Walt. I'll let you know what I find with the upcoming experiment(s).

72,

Jim, K8IQY

# 617. alignment problems

Yahoo group: SS-40
Date: 2014-08-07 03:50:46 UTC
From: sreedq1014@...
Topic: 617  Message: 617

Hello group.

Here is my situation. My VXO only tunes 21 khz.
TC 3 peaks well, but TC 2,1 in sequence don't change in vol. at all.
TR1 reads 1.41v, and does'nt adj., though I read that informative conversation. Earlier, I was able to adjust it to 1v, but I reset TR1 to the middle again, in another alignment attempt, hoping to improve my tuning range.
At the VXH, I was only able to read .1v with my N5ESE -RF probe. (not .8v). This is with the build complete.
Early on, I mistakenly mixed up the two variable resistors, TR 1,2. The markings were poorly visible on the component and I thought they must be of the same value. Then, with a magnifier glass, I found their value, replaced them, as I had them in backwards. My voltages appear fine. Are there some "final assembly" reads-test points I could compare with? Thanks much for a fine receiver. This is my second one, set up to the 7122 freq. 73, Shawn,kf7yff.

# 618. DeLuxe SS-40

Yahoo group: SS-40
Date: 2014-08-08 16:16:51 UTC
From: Bernie Linthorst
Topic: 618  Message: 618

Jim,
Are you ever develop the SS-40 for other bands? (SS-20, SS-18,etc.) How about a SS-40 with a VFO for the whole CW section?
(I have a hard time hearing anything in the present VXO range)
73's
Bernie. KD4SBY

# 619. Re: [SS-40] DeLuxe SS-40

Yahoo group: SS-40
Date: 2014-08-08 16:22:39 UTC
From: Stephen Farthing
Topic: 618  Message: 619

Bernie,

I think a lot of people have asked this question over the years. I keep on meaning to buy a kit for conversion to 30 meters. However I suspect that the big problem is availability of suitable crystals. But I have actually wondered if a convertor would be realisable using the SS-40 as an IF strip.....

73s Steve G0XAR

On 8 August 2014 17:16, Bernie Linthorst hbl77@... [SS-40] <
SS-40@yahoogroups.com> wrote:

>
>
> Jim,
> Are you ever develop the SS-40 for other bands? (SS-20, SS-18,etc.) How
> about a SS-40 with a VFO for the whole CW section?
> (I have a hard time hearing anything in the present VXO range)
> 73's
> Bernie. KD4SBY
>
>
>

# 620. Re: [SS-40] alignment problems

Yahoo group: SS-40
Date: 2014-08-11 16:26:02 UTC
From: Jim Kortge
Topic: 617  Message: 620

On 8/6/2014 11:50 PM, sreedq1014@... [SS-40] wrote:
>
>
> Hello group.

Hello,
>
> Here is my situation. My VXO only tunes 21 khz.

What frequency range does your SS-40 tune?
>
> TC 3 peaks well, but TC 2,1 in sequence don't change in vol. at all.

Something wrong there. Recount the turns on L1 and L4. If they are correct and it still doesn't tune. Take them both out and reduce the turns by 2; 26 turns on L1 and 27 turns on L4. See if that fixes the peaking issue. Also, when peaking up the front end, make sure the AGC pot (TR1) is tuned fully CCW, so that the front-end is running at maximum gain.

>
> TR1 reads 1.41v, and does'nt adj., though I read that informative
> conversation.

TR1 does not change the 1.41 v level on the Rx-AGC line unless there is a signal into the input or noise, when the rig is connected to an antenna.

Earlier, I was able to adjust it to 1v, but I reset TR1
> to the middle again, in another alignment attempt, hoping to improve
> my tuning range.

The tuning range is independent of the AGC level and the front-end alignment.
>
> At the VXH, I was only able to read .1v with my N5ESE -RF probe. (not
> .8v). This is with the build complete.

Your VXH level is way too low. That means the mixer isn't being driven enough to receive properly. Something is very wrong in the VXO (tuning part) part of the rig. What were the measurements you got when you built that part of the rig and made the suggested measurements?

>
> Early on, I mistakenly mixed up the two variable resistors, TR 1,2.
> The markings were poorly visible on the component and I thought they
> must be of the same value.

They are clearly show on the parts page to be very different.

Then, with a magnifier glass, I found their
> value, replaced them, as I had them in backwards.

I hope you didn't damage the PCB taking them out.

My voltages appear
> fine.

Not if the VXH output is only measuring 0.1 volt.

Are there some "final assembly" reads-test points I could
> compare with?

Not needed if you took the measurements along the way.

Thanks much for a fine receiver. This is my second one,
> set up to the 7122 freq.

Does the first receiver work? If so, that is the best source of
voltage measurement you will have access to.

73, Shawn,kf7yff.

72,

Jim, K8IQY

# 621. Re: [SS-40] DeLuxe SS-40

Yahoo group: SS-40
Date: 2014-08-11 16:31:27 UTC
From: Jim Kortge
Topic: 618  Message: 621

On 8/8/2014 12:16 PM, Bernie Linthorst hbl77@... [SS-40] wrote:
>
>
> Jim,

Hi Bernie,

> Are you ever develop the SS-40 for other bands? (SS-20, SS-18,etc.)

Yes, I've built one for 10-Meters and have another one on the bench being built for 30-Meters. I also have one on 17-Meters using a 17-Meter to 40-Meter receive converter ahead of it. That one works great too.

> How about a SS-40 with a VFO for the whole CW section?

Others have solved the problem using a DDS VFO or an Si-570 VFO.

> (I have a hard time hearing anything in the present VXO range)

7.040 MHz receiver or the 7.122 MHz version? 7.122 can be kinda sparse I've found.

> 73's
> Bernie. KD4SBY
>

72,

Jim, K8IQY

# 622. Re: [SS-40] alignment problems

Yahoo group: SS-40
Date: 2014-08-12 04:45:58 UTC
From: Shawn Reed
Topic: 617  Message: 622

Hello Jim.

L1 and L4 don't seem to be a problem. I did rewind them. I already had 26 and 27 turns wound, which came to be, by using my ADE LC Meter IIB. I had them set  to 3.1 uH, and 3.3 uH. For the rewinds, I did the full 28 and 29 turns. No change with the alignment. They now read 3.48 uH, and L4 - 3.76 uH. I think I will put them back a couple turns again, but wanted to see.

My VXO tunes from 16313.3 khz, to 16336.8 khz. A spread of 23.5 khz. I am using KD1JV's digital counter that I calibrated as best I can, to a Si750. I am getting .62 volts at VXH, with RF probe. These have improved, tho intermittent. I have the lower spec'ed SA612AN. Does that make any difference?

I went on to visually check values of components, and upon inspecting L3, moulded inductor, I saw a crack in its shell. I removed it and checked it on my meter. It was reading, but closer to half of its 1000 uH. Then the end fell off.....This most likely may have been the culprit. (And I most likely broke it).

Yes, my first SS-40 worked so fine. I traded it though to another ham. That is why I had to have another. This time with the transmitter combo.  I have a nice case already built.

I would request next time though, that such a kit(s) be mailed in a box. Both rx and tx boards and parts came stuffed in a small padded envelope, where one board took a warp. I was a little distraught, but I'm fine now :)

 Thanks very much for your time, Jim, as I will be needing more, for sure!
73, Shawn kf7yff.

On Monday, August 11, 2014 9:26 AM, "Jim Kortge jim.k8iqy@... [SS-40]" <SS-40@yahoogroups.com> wrote:

On 8/6/2014 11:50 PM, sreedq1014@... [SS-40] wrote:
>
>
> Hello group.

Hello,
>
> Here is my situation. My VXO only tunes 21 khz.

What frequency range does your SS-40 tune?
>
> TC 3 peaks well, but TC 2,1  in sequence don't change in vol. at all.

Something wrong there.  Recount the turns on L1 and L4.  If they are correct and it still doesn't tune.  Take them both out and reduce the turns by 2; 26 turns on L1 and 27 turns on L4.  See if that fixes the peaking issue.  Also, when peaking up the front end, make sure the AGC

pot (TR1) is tuned fully CCW, so
that the front-end is running at
maximum gain.

>
> TR1 reads 1.41v, and does'nt adj., though I read that informative
> conversation.

TR1 does not change the 1.41 v level on the Rx-AGC line unless there
is a signal into the input or noise, when the rig is connected to an
antenna.

  Earlier, I was able to adjust it to 1v, but I reset TR1
> to the middle again, in another alignment attempt, hoping to improve
> my tuning range.

The tuning range is independent of the AGC level and the front-end
alignment.
>
> At the VXH, I was only able to read .1v with my N5ESE -RF probe. (not
> .8v). This is with the build complete.

Your VXH level is way too low.  That means the mixer isn't being
driven enough to receive properly.  Something is very wrong in the VXO
(tuning part) part of the rig.  What were the measurements you got
when you built
that part of the rig and made the suggested measurements?

>
> Early on, I  mistakenly mixed up the two variable resistors, TR 1,2.
> The markings were poorly visible on the component and I thought they
> must be of the same value.

They are clearly show on the parts page to be very different.

  Then, with a magnifier glass, I found their
> value, replaced them, as I had them in backwards.

I hope you didn't damage the PCB taking them out.

  My voltages appear
> fine.

Not if the VXH output is only measuring 0.1 volt.

  Are there some "final assembly" reads-test points I could
> compare with?

Not needed if you took the measurements along the way.

  Thanks much for a fine receiver. This is my second one,
> set up to the 7122 freq.

Does the first receiver work?  If so, that is the best source of voltage
measurement you will have access to.

73, Shawn,kf7yff.

72,

Jim, K8IQY

---

---

---

Yahoo Groups Links

https://info.yahoo.com/legal/us/yahoo/utos/terms/

# 623. Re: alignment problems

Yahoo group: SS-40
Date: 2014-08-17 03:23:53 UTC
From: sreedq1014@...
Topic: 617  Message: 623

Hello Jim.
...As long as the sky is high, the trees are green, and the grass is blue. Old Indian saying-or something like that. (-:

Working on my rx as of yet. The three var. caps peak just fine now. I searched for a day and at the end of it, I finally came across a small, blu-gray looking pea, with colored dots on it (brn, blk, & red), and two antennas sticking out. Checked out to be 1mH -on the nose (L-3). So now everything seems to be ok - up to the mixer. I tested further, still without finding anything to help my VXO tuning spread. I then replaced the ADE-1 mixer to rule it out. Also the varactor diode I replaced it thinking maybe the capacitance was not all there. I checked all components values. they are in order.

I studied long these last couple days reviewing the superhet rec. , ladder crystal filters, and the sum, difference, the LO, IF, RF. Do I find 7.13 Mhz somewhere to read? My amplification seems fine. I am hearing strong signals. Distinguishable voice at the end of my tuning. Is that telling of anything? Filtering? Tr-1 adjusts to 1.1v. Tr-2 doesn't seem to have the adjusting range it should.

Here is where I'm sitting now -- VHX - 16317.4 Mhz to 16339.3 Mhz. (21.9 Hhz tuning range). pretty much the same as before. What else could be in play? Remember, I am a two year rookie only. The work apears good, the boad is clean. The only place I find 9.21 Mhz is at X5. Maybe that is the only place I should find it. Shawn kf7yff.

# 624. Re: [SS-40] Re: alignment problems

Yahoo group: SS-40
Date: 2014-08-17 12:18:01 UTC
From: Jim Kortge
Topic: 617  Message: 624

On 8/16/2014 11:23 PM, sreedq1014@... [SS-40] wrote:
>
>
> Hello Jim.

Hello Shawn,

> ...As long as the sky is high, the trees are green, and the grass
> is blue. Old Indian saying-or something like that. (-:
> Working on my rx as of yet. The three var. caps peak just fine now.

OK, that is good.

I
> searched for a day and at the end of it, I finally came across a
> small, blu-gray looking pea, with colored dots on it (brn, blk, &
> red), and two antennas sticking out. Checked out to be 1mH -on the
> nose (L-3).

Was that inductor bad or lost? Why did you think you needed a
replacement?

So now everything seems to be ok - up to the mixer. I
> tested further, still without finding anything to help my VXO tuning
> spread.

None of what you've done has any effect on the VXO tuning. It is
conrolled by the 3 crystals, the L9 series inductor, and the varicap
diode, which I'm sure is a good unit.

I then replaced the ADE-1 mixer to rule it out.

There was no need to do that either.

Also the
> varactor diode I replaced it thinking maybe the capacitance was not
> all there. I checked all components values. they are in order.

Well good, but no need to change out the varicap either.

> I studied long these last couple days reviewing the superhet rec.
> , ladder crystal filters, and the sum, difference, the LO, IF, RF. Do
> I find 7.13 Mhz somewhere to read?

That's the incoming frequency that the receiver hears, well actually,
7.122 MHz plus or minus the VXO tuning.

My amplification seems fine. I am
> hearing strong signals. Distinguishable voice at the end of my tuning.
> Is that telling of anything?

Yes, that the receiver is working. The voice (SSB) should not be intelligible, as it is on Lower Sideband, and the receiver is set up to hear Upper Sideband, to keep interference from SSB signals to a minimum.

Filtering? Tr-1 adjusts to 1.1v.

With incoming signal, hopefully.

Tr-2
> doesn't seem to have the adjusting range it should.

Why do you state that?

> Here is where I'm sitting now -- VHX - 16317.4 Mhz to 16339.3
> Mhz. (21.9 Hhz tuning range).

And that is covering 7.1044 MHz to 7.1263 MHz; so it sounds to me like it is covering the 7.122 MHz net frequency just fine. 22 KHz tuning range is a tad smaller than some rigs, but I'm sure there are other that won't tune that wide. It solely depends on the crystal set and how far they can be pulled as a group.I'd be very happy with that range.

pretty much the same as before. What
> else could be in play?

VXO Crystals!

Remember, I am a two year rookie only. The
> work apears good, the boad is clean. The only place I find 9.21 Mhz is
> at X5.

It begins on the output of the IF port on the mixer and keeps getting amplified until it is as large as it can get with the available amplification in the U1A and U1B string, then is fed to the input of the U2, the product detector. The output of the that stage is audio. Unless you have a spectrum analyzer, you won't be able to see or measure the IF signal, nor the input to the receiver for that matter. Those are usually in the microvolt to a few millivolts level.

Maybe that is the only place I should find it.

See comments above.

Shawn kf7yff.

Sounds to me like you have a fine working receiver.

72,

Jim, K8IQY

>
>
>

# 625. Panel template for SS-40HT

Yahoo group: SS-40
Date: 2014-09-06 23:13:44 UTC
From: meyeed@...
Topic: 625  Message: 625

I thought I had seen a panel drilling/punch template for the SS-40HT, but I don't seem to be able to find it now.
Am I missing something?
Karen's rig is finished and ready to mount in a enclosure (my job) and I was looking for a panel template but no luck.
Let me know if you have one I can use, before I spend time messing it up on my own.
thanks and 72/3,
-Ed, WG5F-

# 626. Re: [SS-40] Panel template for SS-40HT

Yahoo group: SS-40
Date: 2014-09-06 23:35:29 UTC
From: WA0ITP
Topic: 625  Message: 626

GA Ed,

I'm sri but I never got around to creating one.

On 9/6/2014 6:13 PM, meyeed@... [SS-40] wrote:
>
>
> I thought I had seen a panel drilling/punch template for the SS-40HT,
> but I don't seem to be able to find it now.
>
> Am I missing something?
>
> Karen's rig is finished and ready to mount in a enclosure (my job) and
> I was looking for a panel template but no luck.
>
> Let me know if you have one I can use, before I spend time messing it
> up on my own.
>
> thanks and 72/3,
>
> -Ed, WG5F-
>
>
>
>

--
72 WAØITP
I love this radio stuff.
www.wa0itp.com
wa0itp@...
www.4sqrp.com

# 627. Re: [SS-40] Panel template for SS-40HT

Yahoo group: SS-40
Date: 2014-09-06 23:56:41 UTC
From: meyeed@...
Topic: 625  Message: 627

Okie Doke, Terry. Onward thru the fog! 72/3 -Ed, WG5F-

# 628. Hello

Yahoo group: SS-40
Date: 2014-10-08 03:59:28 UTC
From: pulsarxp@...
Topic: 628  Message: 628

I just joined the group today and thought I would say hello. I don't have SS-40 kit but look forward to buying one when they sell another run of them. It looks like a nice receiver and a fun kit to build.
Lee, w0vt

# 629. Re: [SS-40] Hello

Yahoo group: SS-40
Date: 2014-10-08 09:06:28 UTC
From: Dave
Topic: 628  Message: 629

For what it's worth, I love mine. Lots of fun and quite sensitive. Need to some day hook up a digital dial on it. Anyone done that yet?

Dave K8WPE

> On Oct 7, 2014, at 11:59 PM, pulsarxp@... [SS-40] <SS-40@yahoogroups.com> wrote:
>
> I just joined the group today and thought I would say hello. I don't have SS-40 kit but look forward to buying one when they sell another run of them. It looks like a nice receiver and a fun kit to build.
>
> Lee, w0vt
>
>

# 630. Re: [SS-40] Hello

Yahoo group: SS-40
Date: 2014-10-08 12:00:25 UTC
From: WA0ITP
Topic: 628  Message: 630

Good Morning Lee and welcome. We are busy bringing out another kit and keeping up with demands of a recent release. Then we'll do anpother run of the SS-40. Glad to have you on board.

--
72 WAØITP
I love this radio stuff.
www.wa0itp.com
wa0itp@...
www.4sqrp.com

On 10/7/2014 10:59 PM, pulsarxp@... [SS-40] wrote:
>
>
> I just joined the group today and thought I would say hello. I don't
> have SS-40 kit but look forward to buying one when they sell another
> run of them. It looks like a nice receiver and a fun kit to build.
>
> Lee, w0vt
>
>
>
>

--
72 WAØITP
I love this radio stuff.
www.wa0itp.com
wa0itp@...
www.4sqrp.com

# 631. Re: [SS-40] Hello

Yahoo group: SS-40
Date: 2014-10-08 12:10:25 UTC
From: WA0ITP
Topic: 628  Message: 631

GM Dave,

Dont know, but probably. IQY has adapted the Freq-Mite to it however. The instructions are found in the Installation Notes on the Freq-Mite page http://www.4sqrp.com/freq-mite.php The would be similar for a digial display. Have fun with the SS-40.

On 10/8/2014 4:06 AM, Dave djwilcox01@... [SS-40] wrote:
>
>
> For what it's worth, I love mine. Lots of fun and quite sensitive.
> Need to some day hook up a digital dial on it. Anyone done that yet?
>
> Dave K8WPE
>
>
>
> On Oct 7, 2014, at 11:59 PM, pulsarxp@...
> <mailto:pulsarxp@...> [SS-40] <SS-40@yahoogroups.com
> <mailto:SS-40@yahoogroups.com>> wrote:
>
>> I just joined the group today and thought I would say hello. I don't
>> have SS-40 kit but look forward to buying one when they sell another
>> run of them. It looks like a nice receiver and a fun kit to build.
>>
>> Lee, w0vt
>>
>
>
>

--
72 WAØITP
I love this radio stuff.
www.wa0itp.com
wa0itp@...
www.4sqrp.com

# 632. SS40 RX Circuit question?

Yahoo group: SS-40
Date: 2014-11-28 01:29:08 UTC
From: puttinggreen@...
Topic: 632  Message: 632

Could someone explain the purpose of C13 (270 pF) in the input stages of the SS40 RX...and is it's value frequency dependent?

Herb Watson AA1IY

# 633. Re: SS40 RX Circuit question?

Yahoo group: SS-40
Date: 2014-11-28 13:59:20 UTC
From: jimamos@...
Topic: 632  Message: 633

Hi Herb,

Yes, it's frequency dependent. It looks like L2 and C13 make a matching circuit for the input impedance of Q1, a grounded gate J310. So, it's matching 50 Ohm to 200 Ohms. It also looks like they resonated the inductor to 7 MHz with C3 and TC1 for a band pass input filter.

Regards,
Jim N8CAH

# 634. Re: [SS-40] SS40 RX Circuit question?

Yahoo group: SS-40
Date: 2014-11-28 18:35:30 UTC
From: Jim Kortge
Topic: 632  Message: 634

On 11/27/2014 8:29 PM, puttinggreen@... [SS-40] wrote:
>
>
> Could someone explain the purpose of C13 (270 pF) in the input stages
> of the SS40 RX...and is it's value frequency dependent?

Herb,

That capacitor is there to roll off the frequency response of the series tuned LC (TC1 - L2) input filter on the high side of the bandpass. It is frequency dependent, but not terribly critical. A 220 pF at the location would provide a bit less higher frequency attenuation and a 330 pF would provide more than does the 270 pF.

72,

Jim, K8IQY

# 635. Re: [SS-40] Hello

Yahoo group: SS-40
Date: 2014-12-21 19:39:57 UTC
From: michael_byrd73@...
Topic: 628  Message: 635

Although this message was two months ago... I am ready to build. Count me in as well.

Mike, AC4UR

# 636. SS-40 availability

Yahoo group: SS-40
Date: 2014-12-23 14:46:57 UTC
From: michael_byrd73@...
Topic: 636  Message: 636

I just joined this list after following the website for awhile. Does anyone have information about when this kit will be available again?
I like the receiver and think it will be very useful with another project I am working on.

Mike, AC4UR

# 637. Re: SS-40 availability

Yahoo group: SS-40
Date: 2014-12-25 14:08:34 UTC
From: Johnny Matlock
Topic: 636  Message: 637

Gm Mike
Happy Holidays!
We're currently planning another run of the SS40 both Tx and Rx.
It usually takes a month if so to get the parts ordered to beging kitting.
72
Johnny AC0BQ

--
QRP....."more smiles per watt"
72
JOHNNY AC0BQ ..

# 638. Re: [SS-40] Re: SS-40 availability

Yahoo group: SS-40
Date: 2014-12-25 20:41:21 UTC
From: Michael Byrd
Topic: 636  Message: 638

Johnny,
Thanks for the update and am looking forward to building. Hope your Holiday is great!
Mike, AC4UR

On Thursday, December 25, 2014 9:08 AM, "Johnny Matlock jomatlock@... [SS-40]" <SS-40@yahoogroups.com> wrote:

Gm MikeHappy Holidays!We're currently planning another run of the SS40 both Tx and Rx.It usually takes a month if so to get the parts ordered to beging kitting.72Johnny AC0BQ

--
QRP....."more smiles per watt"
72
JOHNNY AC0BQ  ..

# 639. SS-40HT -new run

Yahoo group: SS-40
Date: 2015-03-17 21:37:14 UTC
From: sq8luy@...
Topic: 639  Message: 639

Hi

When can we expect new run of SS-40HT.
I am impatiently waiting for this beauty!

mike

# 640. Re: [SS-40] SS-40HT -new run

Yahoo group: SS-40
Date: 2015-03-17 23:33:19 UTC
From: Dennis Gaskill
Topic: 639  Message: 640

wayne.dillon@...

Wayne is the kitter for the SS40.
He will know.

Dennis KC0IFQ

On Tue, Mar 17, 2015 at 4:37 PM, sq8luy@... [SS-40] <
SS-40@yahoogroups.com> wrote:

>
>
> Hi
>
> When can we expect new run of SS-40HT.
> I am impatiently waiting for this beauty!
>
>
> mike
>
>
>
>

# 641. Re: [SS-40] Digest Number 196

Yahoo group: SS-40
Date: 2015-03-18 11:38:42 UTC
From: Wayne Dillon
Topic: 641  Message: 641

Planning to release the new run at O'con,
Keep an eye on the 4SQRP reflector
Wayne - KC0PMH

On Wed, Mar 18, 2015 at 5:29 AM, <SS-40@yahoogroups.com> wrote:

> [image: Yahoo! Groups]
> <https://groups.yahoo.com/neo;_ylc=X3oDMTJlbXIxc3N0BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTQyNjY3NDU5NQ-->
> SS-40 Receiver Group
> <https://groups.yahoo.com/neo/groups/SS-40/info;_ylc=X3oDMTJlZDBrZzI4BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDaGRyBHNsawNocGgEc3RpbWUDMTQyNjY3NDU5NQ-->
> 2 Messages
> Digest #196
> 1a
> SS-40HT -new run <#14c2c6eba7d9f948_1a> by sq8luy
> 1b
> Re: SS-40HT -new run <#14c2c6eba7d9f948_1b> by "Dennis Gaskill" gaskilld
>
> Messages
> 1a SS-40HT -new run
> <https://groups.yahoo.com/neo/groups/SS-40/conversations/topics/639;_ylc=X3oDMTJxdDRobWI0BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM2MzkEc2VjA2Rtc2cEc2xrA3Ztc2cEc3RpbWUDMTQyNjY3NDU5NQ-->
> Tue Mar 17, 2015 2:37 pm (PDT) . Posted by: sq8luy
> <sq8luy@...?subject=Re%3A%20SS-40HT%20-new%20run>
> Hi
>
> When can we expect new run of SS-40HT.
> I am impatiently waiting for this beauty!
>
>
> mike
>
>
> Reply to sender
> <sq8luy@...?subject=Re%3A%20SS-40HT%20-new%20run> . Reply to
> group <SS-40@yahoogroups.com?subject=Re%3A%20SS-40HT%20-new%20run> .
> Reply via Web Post
> <https://groups.yahoo.com/neo/groups/SS-40/conversations/messages/639;_ylc=X3oDMTJxdWVicDhwBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM2MzkEc2VjA2Rtc2cEc2xrA3JwbHkEc3RpbWUDMTQyNjY3NDU5NQ--?act=reply&messageNum=639>
> . All Messages (2)
> <https://groups.yahoo.com/neo/groups/SS-40/conversations/topics/639;_ylc=X3oDMTM0MzV2b2JyBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM2MzkEc2VjA2Rtc2cEc

2xrA3Z0cGMEc3RpbWUDMTQyNjY3NDU5NQR0cGNJZAM2Mzk->
> . Top ^ <#14c2c6eba7d9f948_toc>
> 1b Re: SS-40HT -new run
> <https://groups.yahoo.com/neo/groups/SS-40/conversations/topics/640;_ylc=X3oDMTJxaXAxYWN
0BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM2NDAEc2VjA2Rtc2cEc
2xrA3Ztc2cEc3RpbWUDMTQyNjY3NDU5NQ-->
> Tue Mar 17, 2015 4:33 pm (PDT) . Posted by: "Dennis Gaskill" gaskilld
> <gaskilldg@...?subject=Re%3A%20SS-40HT%20-new%20run>
> wayne.dillon@...
>
> Wayne is the kitter for the SS40.
> He will know.
>
> Dennis KC0IFQ
>
> On Tue, Mar 17, 2015 at 4:37 PM, sq8luy@... [SS-40] <
> SS-40@yahoogroups.com> wrote:
>
> >
> >
> > Hi
> >
> > When can we expect new run of SS-40HT.
> > I am impatiently waiting for this beauty!
> >
> >
> > mike
> >
> >
> >
> >
> Reply to sender
> <gaskilldg@...?subject=Re%3A%20SS-40HT%20-new%20run> . Reply to
> group <SS-40@yahoogroups.com?subject=Re%3A%20SS-40HT%20-new%20run> .
> Reply via Web Post
> <https://groups.yahoo.com/neo/groups/SS-40/conversations/messages/640;_ylc=X3oDMTJxMXJmM
WMxBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM2NDAEc2VjA2Rtc2c
Ec2xrA3JwbHkEc3RpbWUDMTQyNjY3NDU5NQ--?act=reply&messageNum=640>
> . All Messages (2)
> <https://groups.yahoo.com/neo/groups/SS-40/conversations/topics/639;_ylc=X3oDMTM0NDFoM2x
mBF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM2NDAEc2VjA2Rtc2cEc
2xrA3Z0cGMEc3RpbWUDMTQyNjY3NDU5NQR0cGNJZAM2Mzk->
> . Top ^ <#14c2c6eba7d9f948_toc>
> Visit Your Group
> <https://groups.yahoo.com/neo/groups/SS-40/info;_ylc=X3oDMTJmZzRjOWRwBF9TAzk3MzU5NzE1BGd
ycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW1lAzE0MjY2NzQ1OTU->
>
> - New Members
> <https://groups.yahoo.com/neo/groups/SS-40/members/all;_ylc=X3oDMTJnYmNuNWxuBF9TAzk3MzU5
NzE1BGdycElkAzc0Njc4NzQ2BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bWJycwRzdGltZQMxNDI2Nj
c0NTk1>

> 2
>
> [image: Yahoo! Groups]
> <https://groups.yahoo.com/neo;_ylc=X3oDMTJlbXIxc3N0BF9TAzk3MzU5NzE1BGdycElkAzc0Njc4NzQ2B
GdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTQyNjY3NDU5NQ-->
> • Privacy <https://info.yahoo.com/privacy/us/yahoo/groups/details.html> •
> Unsubscribe <SS-40-unsubscribe@yahoogroups.com?subject=Unsubscribe> • Terms
> of Use <https://info.yahoo.com/legal/us/yahoo/utos/terms/>
>

--
*http://www.qsl.net/kc0pmh/ <http://www.qsl.net/kc0pmh/> Under
construction but please visit anyway.*

*QRP* - *EFFICIENCY AND SKILL, NOT POWER.*

I'm British by birth but American by CHOICE!

Jesus came to pay a debt He didn't owe because we owe a debt we cannot
pay...

The Lord bless you and keep you
The Lord make His face shine upon you, and be gracious unto you
The Lord lift up his contenance upon you and give you peace.

God Bless from Wayne Dillon - KC0PMH

Joshua 24:14-15
2 Cor 5:17
1 Jn 2:17

http://www.4sqrp.com/index.php
Membership Chairman - 4SQRP Group
4SQRP #95
FISTS 17184
FPQRP #342 (Flying Pigs QRP Club)
NAQCC # 0759
QRP-ARCI #11505
SKCC #1155T
CW Ragchewers Anonymous #40
SOC #848
30MDG#1176
NEQRP #693
GORC #192
DMC (Digital Modes Club) # 06686

# 642. Just placed order... Yeah!

Yahoo group: SS-40
Date: 2015-04-13 01:15:29 UTC
From: michael_byrd73@...
Topic: 642  Message: 642

I have been checking the 4 State QRP pages almost daily to see if the SS-40 was available. It is as of this evening when I checked again. Got that order in before they are gone.

Alright, more stuff to build. It should take me several years to build everything I already have as I have a tendency to buy two of each.

Fun for me.
Mike, AC4UR

http://sunbyrdpress.blogspot.com http://sunbyrdpress.blogspot.com

# 643. Re: Just placed order... Yeah!

Yahoo group: SS-40
Date: 2015-04-13 22:48:31 UTC
From: John
Topic: 642  Message: 643

Me too Mike! I need to check my kit inventory cause there's a good chance I already have a SS-40 (or two)!
John, KD5EJA

1

Just placed order... Yeah!

Sun Apr 12, 2015 6:15 pm (PDT) . Posted by:

michael_byrd73
I have been checking the 4 State QRP pages almost daily to see if the SS-40 was available. It is as of this evening when I checked again. Got that order in before they are gone.

Alright, more stuff to build. It should take me several years to build everything I already have as I have a tendency to buy two of each.

Fun for me.
Mike, AC4UR

# 644. Re: Just placed order... Yeah!

Yahoo group: SS-40
Date: 2015-04-13 23:40:25 UTC
From: Johnny Matlock
Topic: 642  Message: 644

Thanks Mike
The club appreciates your order!
72
Johnny AC0BQ

--
QRP....."more smiles per watt"
72
JOHNNY AC0BQ ..

# 645. Re: Just placed order... Yeah!

Yahoo group: SS-40
Date: 2015-04-15 23:45:44 UTC
From: n5xl@...
Topic: 642  Message: 645

Ordered the combo (SS40HT SS40TX) on Monday and went back to the 4SQRP website to check and they appear to be SOLD OUT ALREADY??? Is that right? If that is the case, I'm glad I got my order in on Monday!

72 N5XL

# 646. Re: [SS-40] Re: Just placed order... Yeah!

Yahoo group: SS-40
Date: 2015-04-15 23:47:46 UTC
From: WA0ITP
Topic: 642  Message: 646

We're ronding up somemore unsold kits and will reopen when we have a
firm count of what is left.

72 WAØITP
I love this radio stuff.
www.wa0itp.com
wa0itp@...

On 4/15/2015 6:45 PM, n5xl@... [SS-40] wrote:
>
>
> Ordered the combo (SS40HT SS40TX) on Monday and went back to the 4SQRP
> website to check and they appear to be SOLD OUT ALREADY??? Is that
> right? If that is the case, I'm glad I got my order in on Monday!
>
> 72 N5XL
>
>
>

# 647. Re: Just placed order... Yeah!

Yahoo group: SS-40
Date: 2015-04-18 18:08:15 UTC
From: michael_byrd73@...
Topic: 642  Message: 647

Wow, the package came in today's mail (Saturday). That was fast, thanks.

Mike, AC4UR

http://sunbyrdpress.blogspot.com/p/homebrew.html
http://sunbyrdpress.blogspot.com/p/homebrew.html

# 648. Re: Just placed order... Yeah!

Yahoo group: SS-40
Date: 2015-04-24 13:43:08 UTC
From: jimamos@...
Topic: 642  Message: 648

I placed on a combo kit order on Sunday 4/19, any idea when the next batch of kits will get shipped?

Thanks,
Jim N8CAH

# 649. Test mssg

Yahoo group: SS-40
Date: 2015-08-11 20:24:50 UTC
From: WA0ITP
Topic: 649  Message: 649

Having problems posting to Yahao groups, and trying to isolate the problem url.

--
72 WAØITP
I love this radio stuff.
www.wa0itp.com
wa0itp@...

# 650. Re: [SS-40] Test mssg

Yahoo group: SS-40
Date: 2015-08-11 23:50:57 UTC
From: robert pearl
Topic: 649  Message: 650

You came through here just fine. Hope the best in your hunt for the cure.Bob w7utp

On Tuesday, August 11, 2015 1:23 PM, "WA0ITP wa0itp@mchsi.com [SS-40]" <SS-40@yahoogroups.com> wrote:

  Having problems posting to Yahao groups, and trying to isolate the problem url. --
72 WAØITP
I love this radio stuff.
www.wa0itp.com
wa0itp@...

# 652. K3KY SS-40HT/SS-40TX Build

Yahoo group: SS-40
Date: 2015-08-29 18:38:41 UTC
From: geodyne49@...
Topic: 652  Message: 652

Hi, All-

I was lucky to find these kits available recently- I promptly ordered the pair, and am finishing up the receiver right now. It worked 'out of the box'. All parts needed were there, with the exception of the terminals used to mount the two pots to the board. I believe the parts list should call out 4 pieces, but it lists 2, and that is what I received. No worries, as I am planning a slightly more custom packaging where the two pots don't attach directly to the PCB. Using my HP 3466A DMM and AADE LC-IIB meter I took the time to measure and verify almost every part before mounting in the board (skipped the 0.1/0.01uF coupling/bypass caps). I was rewarded to see the desired test results at each and every step along the way. It was most gratifying to hear the note from my main rig in the SS-40HT receiver at 7030KHz. I'll do a proper alignment next using my signal generator, then turn to packaging the receiver. I plan to use a 10-turn pot for tuning, and will put a spinner knob on it, as it will be a little slow tuning. The supplied single turn pot is quite usable, but a wee bit fast tuning for me. A 3-turn pot would be ideal, but I'm just going with what I have on hand.

Next I'll build the SS-40TX and include it in the same enclosure. I'm looking forward to giving the pair a good workout on 40 meters soon. Oh, I do plan to include a frequency counter in the package. Those Chinese counters on Ebay have proved irresistible to me. I own a few of them. Prices on many are now down around the 10-12 dollar range, if you search a little. A separate power switch for the counter is appropriate, BTW, as they can really eat up your battery life if left on- or go with an LCD counter instead of the more common LED type.

The VXO in this SS-40HT ended up tuning from 6989 to 7030KHz, I'm guessing that playing with the inductor value in the VXO would bring it up about 20-25KHz easily enough, although what it's doing right now is acceptable as is. I was amazed to see a slightly greater than 40KHz tuning range on this unit. Hope that still holds true if I bump it up a little. I agree that coverage of the 'QRP watering holes at 7030 and 7040 are a very good idea. If I ended up with this one covering 7020 to 7060 I think that would be ideal- however close to the crystal's natural resonance as is possible, anyway.

Congratulations to Jim, K8IQY on a nice design that's easy to build and looks to be great for use in day to day QRP operating.

73, David K3KY

# 653. Re: [SS-40] K3KY SS-40HT/SS-40TX Build

Yahoo group: SS-40
Date: 2015-08-31 13:17:17 UTC
From: Jim Kortge
Topic: 652  Message: 653

On 8/29/2015 2:38 PM, geodyne49@... [SS-40] wrote:
>
>
> Hi, All-
>
> I was lucky to find these kits available recently- I promptly ordered
> the pair,
> and am finishing up the receiver right now. It worked 'out of the
> box'. All
> parts needed were there, with the exception of the terminals used to mount
> the two pots to the board. I believe the parts list should call out 4
> pieces,
> but it lists 2, and that is what I received.

Well that is a mistake and my fault for not getting the latest BoM
updated to show that 4 pins are needed. The good news is that the
ordering BoM from Mouser calls for 4 pin per kit, but Garrett, our
kitter didn't know that, so didn't put them in. I'll try to get the
BoM in the Assembly Manual updated today, but have the grand kids here
so it might not get done.

- snip-

> The VXO in this SS-40HT ended up tuning from 6989 to 7030KHz, I'm
> guessing that playing with the inductor value in the VXO would bring it
> up about 20-25KHz easily enough, although what it's doing right now is
> acceptable as is. I was amazed to see a slightly greater than 40KHz
> tuning range on this unit.

That's wider than most get, so I'm wondering if the VXO crystals have
changed in some way? Same part number we have always ordered, but may
be different due to the manufacturer changes their process.

You can reduce the value of the series inductor some to see if it will
move up so that 7040 is covered. Doing that may reduce the tuning
range though. Maybe the wrong inductor got used in the L9 position.
It should be a 5.6 uH unit.

Hope that still holds true if I bump it up
> a little.

You can always play it that value.

> I agree that coverage of the 'QRP watering holes at 7030 and 7040 are
> a very good idea. If I ended up with this one covering 7020 to 7060
> I think that would be ideal- however close to the crystal's natural
> resonance as is possible, anyway.

Keep us posted on what you find out.
>
> Congratulations to Jim, K8IQY on a nice design that's easy to build
> and looks to be great for use in day to day QRP operating.

Thanks for the kind words David.
>
> 73, David K3KY
>

72 and enjoy the build of the Transmit Strip,

Jim, K8IQY

# 654. Re: [SS-40] K3KY SS-40HT/SS-40TX Build

Yahoo group: SS-40
Date: 2015-08-31 19:21:23 UTC
From: geodyne49@...
Topic: 652  Message: 654

Thanks, Jim-

I've been tuning around with my SS-40HT the past few nights. I think this is going to be a nice radio for dedicated 40m QRP. It's plenty sensitive and selective. If my modest inside loop antenna is delivering any signal at all to the radio, I'm hearing Q5. Not bad, really, for such currently poor band conditions. It compares favorably to the main radio here in any fair test (same antenna).

Since I built by methodically measuring each component before stuffing it in the board, I know for sure that I used the 5.6uH in the VXO. The part actually measured right around 5.6uH on my AADE LC-IIB. So as I guessed, I'll be trying less inductance there, and I suspect that 4.7uH would be perhaps both a good starting point and maybe an end point as well. Yep, I do have a hunch the span might shrink just a little, but the 40KHz span was an unexpected pleasure to see. For sure, the 6989 to 7000KHz span is wasted, but so is the low end of the Extra Class band anyway IMO. I think 7017 to 7045 is a good, practical range for this radio.

My first initial experiment with the VXO produced some amusing results. I thought I could get away with using four of those tiny alligator clips, soldered together as pairs, end to end. I clip leaded a 9.2uH molded choke in parallel with the 5.6uH and saw approximately 16.240 to 16.260MHz on my counter. That would be 7025 to 7045, but with greatly reduced span, of course. All that stray capacitance was no doubt playing havoc with this circuit. I bet the new batch of crystals is indeed a little different than the last, BTW. Despite that, my range of 6989 to 7030 is certainly 'in the ball park'.

At this point, I think I may 'get fancy' and glue on some tiny terminal lugs near the two inductor pads on the pcb- and I do mean tiny. I think I do have such exotics in my collection. I think it's important to keep leads short in this part of the VXO circuit, especially to avoid adding in all sorts of stray capacitance. I'll need to look carefully to see what is actually possible, as the PCB tracks and pads are pretty tiny. I worry that if 4.7uH isn't optimum, I'm going to end up stripping out the plated through holes during repeated trials of different RF chokes.

Another method that might work great is to try a slug tuned coil of the type sometimes used in PTO circuits- with a brass tuning slug that progressively shorts out turns as the slug threads in. These ought to have less of the baggage of lousy temperature coefficient that you might see with a powdered iron slug. Anyway, I bet that substituting a fixed 4.7uH would probably be close to optimum

anyway- or maybe 3.3uH. My junk box is rich with possibilities.

For now, I'm putting my SS-40HT on a small, pine breadboard so
I can play with it for a while. I'm chomping at the bit to get going
with the SS-40TX build now. It will be handy to have a platform on
which various external connectors and accessories can be tried
until it seems 'just right'- then into a metal enclosure it goes.

For me, building is one of the funnest aspects of ham radio.
Thanks for a couple of nice radios to play with!

73, David K3KY

# 655. Re: [SS-40] K3KY SS-40HT/SS-40TX Build

Yahoo group: SS-40
Date: 2015-09-02 07:38:38 UTC
From: geodyne49@...
Topic: 652  Message: 655

I spent several hours trying various substitute chokes in the VXO. No joy. Here is a table of data showing what 40m tuning ranges I saw with various substitute chokes in place. All listings are calculated from 16.xxxMHz (measured on counter) minus 9.215MHz. I was not able to duplicate the ~20KHz tuning range I saw previously when I first tried tacking a 9.5uH choke in parallel with the supplied 5.6uH choke. I believe I saw it at that time tuning from 7040 to 7060 or so? Need to go back and check my notes.

Below the table I will describe the various chokes from my collection that were tried in circuit. All frequencies in KHz.

5.6uH 6989.7 7029.8 Original choke spaced up off PCB per instructions

4.7uH 7033.4 7043.9 small green MIL spec resistor

4.7uH 7032.5 7043.5 old, from junk box, white, larger, marked VANG

4.7uH 7034.0 7044.3 small, yellow with color bands

4.6uH 7031.2 7043.1 two Dale in parallel, green, surplus, WE 'KS' p/n

3.5uH 7037.7 7045.8 orig. 5.6uH par. one Dale 'KS' choke (9.5uh)

5.5uH 6983.2 7028.3 Original 5.6uH on wire lead 'stilts' adding ~1/4in

The two readings with the original 5.6uH choke were taken two days apart. Counter inadvertently left on, so some probable warmup drift in 2nd reading. Also 2nd reading is with additional lead length from wire 'stilts' ~1/4in at each end. (for tack-soldering trial components to)

So this kind of leaves me dead in the water. Hope you have some suggestions, Jim. This radio will be a lot more useful if I can somehow move the VXO range up. I have only limited experience with VXO's.
I can see several small value caps around Q7 which could be played with, and of course one might be tempted to start substituting similar voltage variable caps for the MVAM 109 while playing with this circuit. But things could get out of hand quickly. I have a hunch there are many hours of engineering time in that VXO as it is. Notice BTW that my apparent range with the original 5.6uH choke has apparently increased a bit, to 45.1KHz. All that is different is the two wire 'stilts' at L9. Interesting.

Thanks, 73

David K3KY

# 656. Re: [SS-40] K3KY SS-40HT/SS-40TX Build

Yahoo group: SS-40
Date: 2015-09-02 18:35:43 UTC
From: geodyne49@...
Topic: 652 Message: 656

Addendum:

I'm glad I spent a few more hours playing with this VXO. Learned a few things. It does look like the current batch of crystals may have significantly changed parameters. Seems as if one could get the wonderful tuning range I saw if only the crystals natural frequencies were only 20-25KHz higher. HI!

As it is, it looks like the exact value of the inductor L9 is very critical, and one can indeed trade less tuning range for a higher frequency range. Just decrease L9 a tiny bit. One other thing I'm beginning to suspect- the 5.6uH chokes supplied with the kit have 'something special' about them. Perhaps it is the Q of these particular coils, perhaps it has something to do with the DC resistance- I don't know.

I may end up playing with some tiny adjustable inductors, perhaps one fixed in series with one variable, where I try to optimize Q and TC. Anyway, what's the 'magic' with that 5.6uH choke, Jim? It gives by far the best tuning range with this batch of crystals. I'm guessing higher Q, maybe? BTW I seem to remember trying around 10uH in my VXO and the oscillator wouldn't start- FWIW. Used a small, MIL style choke.

On a hunch, I wound a toroidal inductor on a T37-2 core, used 37 turns of 28awg initially. I also tried one series inductor combination prior to that, which confirmed my suspicions about just how critical the inductance of L9 is with the present batch of crystals. A few data points follow:

5.1uH 7023.0 7039.8 Yellow '4.7' (4.2uH) series Black ~0.9uH choke

5.1uH 7021.1 7039.1 T37-2 toroid, 35 turns 28awg

5.15uH 7015.8 7037.2 T37-2 toroid, 36 turns 28awg

I left it at 35 turns on the toroid, tack-soldered to ~1/4in 'stilt' leads. Looks like 34 turns would be the 'sweet spot' with this toroid if coverage of both 7030 and 7040 were considered essential, but at further expense in tuning range. OTOH I may go with 36/37 turns as the best compromise for me right now. I've worked into Europe occasionally on 40 CW using a voltage-fed vertical half wave wire against pretty good radials and running about 30 watts (Knight T-60). The guys over there running Yagis can hear that. They tend to operate in the 7000 to 7025 segment. Perhaps with the present set of crystals I might end up using a switchable amount of inductance for L9? That would work.

So that's where it stands for now. I'm going to move on to my SS-40TX build now. It will be fun to see how much 'illegal' QRP power I can get out of that FET- HI! Nice to have a little headroom and run 'em cooler, however. 5 watts sounds about right...

I heard Tony, ZL2AGY on this morning with my 40m sloper dipole, weak but perfectly Q5. The SS-40HT can dig them out...

73, David K3KY

# 657. Re: [4sqrp] Ss-40HT Tuning Frequency Shift

Yahoo group: SS-40
Date: 2015-09-05 18:59:47 UTC
From: Jim Kortge
Topic: 657  Message: 657

On 9/5/2015 2:25 PM, MM wrote:
> Jim,

Hi Mike,

> I have made your recommended change and here are the results....
> Due to "operator error", I managed to destroy the inductor while
> desoldering.

Sorry to hear about that!
So when I replaced it, that alone raised the low end to
> 7005 and the high end to 7039.

Interesting. I'm beginning to think that the 5.6 uH chokes are higher in value than they should have been. The unit we buy from Mouser is toleranced at +/- 5% and has not been an issue before this kit run.

> So I went ahead and added a 470pf cap in series. Results were 7010 to
> 7042.

Good show. That's ideal! And 32 KHz of coverage too boot. I like it! :-)

That gets me the range I needed, so I am claiming "all is well"

I would agree. Hopefully that fix will work for others.

> Thanks for your suggestion. I wonder if the tolerance on molded
> inductors is enough to make some big differences in results.

See comments above.

I may
> try a toroid and see if that is easier to adjust to the proper freq...

Keep us posted on your experiments please.

> mike n0mpm

72 and thanks for the update Mike,

Jim, K8IQY

# 658. Re: [4sqrp] Ss-40HT Tuning Frequency Shift

Yahoo group: SS-40
Date: 2015-09-06 19:19:08 UTC
From: geodyne49@...
Topic: 657  Message: 658

Jim-

My AADE LC-IIB meter indicated that the 5.6uH choke was actually the right value. Mine is pretty much dead on, and appears closer than 5 percent, more like 1 to 2 percent. If it is not proprietary info, I'd appreciate if you would mention the manufacturer and series of the choke you get from Mouser.

Mike, N0MPM-

Can you share the manufacturer, part number, and source of the replacement choke you used? It's a real touchy value, especially with the current batch of crystals. Also, if you have something like the AADE meter, I'd really appreciate if you could measure the exact inductance of your choke and share the info with the group.

I tried tacking on some capacitors is series with my original 5.6uH choke. Looks like it helps, and is heading in the right direction. Still some further work needed here to see how much better I can get it. I removed my T37-2 toroid with 36 turns and tried the following caps in series with 5.6uH:

5.6uH 6992.0 7030.0 38.0KHz BW 499pF mica series original 5.6uH

5.6uH 7004.1 7033.2 29.1KHz BW 180pF mica series original 5.6uH

5.6uH 7016.4 7036.7 20.2KHz BW 91pF polystyrene series 5.6uH

5.6uH 7003.7 7033.0 29.3KHz BW 180 pF polystyrene series 5.6uH

I noticed my frequency counter indicating that the micas were a little 'drifty'. No surprise there. The polystyrenes were definitely more stable, showing less warmup drift. They do have a small TC, though, as I remember. I will find some C0G ceramics- maybe I can cobble it together using some old 'dogbone' caps. Those often have excellent Q and low or zero TC.

Since I have found the exact inductance value to be so touchy, with ~5.1uH being best in my radio, I plan to try some more experiments with toroids. This time I'll use the -7 mix parts (white cores) for lower TC than the red -2 mix. I'm beginning to get a sense that higher Q inductors and caps are going to give greater bandwidth in this VXO(?) The table data above hints that polystyrene is slightly better than mica. It's admittedly a small difference, however. See lines 2 and 4.

I continue to hear some nice DX with the SS-40HT. Last night EU was coming in Q5 on my modest 40m sloper dipole. Looks like the bands are back...

73, David K3KY

# 659. Re: [SS-40] Re: [4sqrp] Ss-40HT Tuning Frequency Shift

Yahoo group: SS-40
Date: 2015-09-06 23:48:40 UTC
From: Jim Kortge
Topic: 657  Message: 659

On 9/6/2015 3:19 PM, geodyne49@... [SS-40] wrote:
>
>
> Jim-

Hi Mike,

>
> My AADE LC-IIB meter indicated that the 5.6uH choke was actually
> the right value.

Interesting! I'm expecting a kit on Tuesday and will measure the 5.6
uH chokes in that kit as my first task.

Mine is pretty much dead on, and appears closer
> than 5 percent, more like 1 to 2 percent.

The part is speced at +/- 5%, so sounds like it is right on the money.

If it is not proprietary info,
> I'd appreciate if you would mention the manufacturer and series of
> the choke you get from Mouser.

The part we use is made by J. W. Miller and is Mouser part #
542-78F5R6J-RC. We had to make a part change some months ago when the
original inductor stopped being made. I just measured 10 units of the
same part that I had purchased 02/02/2015 and they range in value from
5.65 uH up to 5.92 uH, so are not normally distributed around 5.6 uH,
and are highly biased toward the higher inductance side and at least
one is indeed out of tolerance.

I also just measured 10 Fastron units that I have in my stock and the
part we used to use in the kits. They are +/- 10% units and range
from 5.53 uH to 5.87 uH and look to be normally distributed about the
5.6 uH value. So, it is too soon to say that the inductor is causing
the tuning range shift, but it sure continues to be suspicious.

Stay tuned.....

72,

Jim, K8IQY

>
> Mike, N0MPM-
>
> Can you share the manufacturer, part number, and source of the
> replacement choke you used? It's a real touchy value, especially

> with the current batch of crystals. Also, if you have something like
> the AADE meter, I'd really appreciate if you could measure the
> exact inductance of your choke and share the info with the group.
>
>
>
>
> I tried tacking on some capacitors is series with my original 5.6uH
> choke. Looks like it helps, and is heading in the right direction.
> Still some further work needed here to see how much better I can
> get it. I removed my T37-2 toroid with 36 turns and tried the following
> caps in series with 5.6uH:
>
> 5.6uH 6992.0 7030.0 38.0KHz BW 499pF mica series original 5.6uH
>
> 5.6uH 7004.1 7033.2 29.1KHz BW 180pF mica series original 5.6uH
>
> 5.6uH 7016.4 7036.7 20.2KHz BW 91pF polystyrene series 5.6uH
>
> 5.6uH 7003.7 7033.0 29.3KHz BW 180 pF polystyrene series 5.6uH
>
>
> I noticed my frequency counter indicating that the micas were a little
> 'drifty'. No surprise there. The polystyrenes were definitely more stable,
> showing less warmup drift. They do have a small TC, though, as I
> remember. I will find some C0G ceramics- maybe I can cobble it
> together using some old 'dogbone' caps. Those often have excellent
> Q and low or zero TC.
>
> Since I have found the exact inductance value to be so touchy, with
> ~5.1uH being best in my radio, I plan to try some more experiments
> with toroids. This time I'll use the -7 mix parts (white cores) for lower
> TC than the red -2 mix. I'm beginning to get a sense that higher Q
> inductors and caps are going to give greater bandwidth in this VXO(?)
> The table data above hints that polystyrene is slightly better than mica.
> It's admittedly a small difference, however. See lines 2 and 4.
>
> I continue to hear some nice DX with the SS-40HT. Last night EU
> was coming in Q5 on my modest 40m sloper dipole. Looks like the
> bands are back...
>
> 73, David K3KY
>
>

# 660. Re: [SS-40] Re: [4sqrp] Ss-40HT Tuning Frequency Shift

Yahoo group: SS-40
Date: 2015-09-07 08:45:15 UTC
From: geodyne49@...
Topic: 657  Message: 660

Just a quick note- I spent another evening happily playing with that VXO and can report that I'm getting 32KHz tuning range over 7000 to 7032KHz. Presently have the original 5.6uH choke in series with an old Corning glass cap. Remember those see-through caps that looked like postage stamp micas? Yeah, one of those. Military surplus- has gold plated leads. It is 223pF and is MIL part number CYFR10G221J. Don't know what the TC is on this cap yet. I'll look it up. Warmup drift seems very reasonable, though.

Jim, I wish it were the choke, but I have a sinking feeling it is a parameter change on that recent batch of crystals, with respect to previous batches. Just my gut hunch at the moment.

I'm finding it very hard to get the VXO to cover both 7030 and 7040KHz. OTOH, I'm not that much of a QRP purist, and so can be quite happy with a rig that tunes from 7000 to 7032. I would tend to run my radio with an amp at 20-50+ watts output fairly often.

FWIW I have been able to make it cover 7030 to 7040, but just barely. Usually the tuning range is around 12 to 15KHz at best. I wound a 5.14uH inductor on a T50-7 white core using 35t. #28awg. Had to drop back to about 33 or 32 turns to get that value. It turned out pretty disappointing. Tuning range was 7021 to 7039 with just that toroid. Adding a 180pF mica in series got me 7029 to 7042 approximately- but only a 13 KHz span.

I still think there may be something 'special' about those JW MIller chokes. I'll look them up, too. Perhaps a better than average Q? Anyway, it looks like decreasing inductance decreases tuning range proportionally- but maybe a 5.1uH oddball choke like the Miller would outperform my toroids?

More later, 73,

David K3KY

# 661. Re: [SS-40] Re: [4sqrp] Ss-40HT Tuning Frequency Shift

Yahoo group: SS-40
Date: 2015-09-07 14:24:54 UTC
From: Jim Kortge
Topic: 657  Message: 661

On 9/7/2015 4:45 AM, geodyne49@... [SS-40] wrote:
>
>
> Just a quick note- I spent another evening happily playing with that VXO
> and can report that I'm getting 32KHz

That's a good range, larger than any that I've had on a SS-40HT.

tuning range over 7000 to 7032KHz.
> Presently have the original 5.6uH choke in series with an old Corning
> glass
> cap. Remember those see-through caps that looked like postage stamp
> micas?

No, can't say that I've ever seen one.

Yeah, one of those. Military surplus- has gold plated leads. It is
> 223pF and is MIL part number CYFR10G221J. Don't know what the TC is
> on this cap yet.

The "J" suffix would make it an NP0 type.

I'll look it up. Warmup drift seems very reasonable,
> though.

Drift should only be from crystals, Varicap diode and inductor, not
much if any at all from that Corning capacitor.
>
> Jim, I wish it were the choke, but I have a sinking feeling it is a
> parameter
> change on that recent batch of crystals, with respect to previous batches.
> Just my gut hunch at the moment.

I hope you are wrong, but we'll eventually figure it out.
>
> I'm finding it very hard to get the VXO to cover both 7030 and 7040KHz.

Yes, that seems to be the issue. Most folks would want that and
that's what we have been advertising for the receiver. That's also
where the several runs of kits were too, and where it was designed to be.

> OTOH, I'm not that much of a QRP purist, and so can be quite happy
> with a rig that tunes from 7000 to 7032. I would tend to run my radio with
> an amp at 20-50+ watts output fairly often.

OK, so not so much of an issue for you.
>
> FWIW I have been able to make it cover 7030 to 7040, but just barely.

> Usually the tuning range is around 12 to 15KHz at best.

Should be around 25-27 KHz.

I wound a 5.14uH
> inductor on a T50-7 white core using 35t. #28awg. Had to drop back to
> about 33 or 32 turns to get that value. It turned out pretty
> disappointing.
> Tuning range was 7021 to 7039 with just that toroid.

18 KHz is a bit narrow for the VXO. Removing a few more turns might
get it a bit higher.

Adding a 180pF mica
> in series got me 7029 to 7042 approximately- but only a 13 KHz span.
>
> I still think there may be something 'special' about those JW MIller
> chokes.
> I'll look them up, too. Perhaps a better than average Q? Anyway, it looks
> like decreasing inductance decreases tuning range proportionally-
> but maybe a 5.1uH oddball choke like the Miller would outperform my
> toroids?

Well the issue is that one can't buy 5.0 nor 5.1 uH molded inductors
with leads, at least at any of the suppliers that I know of. Those
values are only available as surface mount components, if they can be
found at all.
>
> More later, 73,
>
> David K3KY

72 and thanks for your update David,

Jim, K8IQY

# 662. Completed SS-40HT/SS-40TX

Yahoo group: SS-40
Date: 2015-09-10 22:43:36 UTC
From: geodyne49@...
Topic: 662  Message: 662

Hi, All-

I posted to the SS-40TX group about just finishing my radio last night.
It's the one dated Sep 10, 2015 in the thread "RIT/XIT..." Heres a link:

SS-40TX Transmitter for SS-40 Receiver
https://groups.yahoo.com/neo/groups/SS-40TX/conversations/messages/30

https://groups.yahoo.com/neo/groups/SS-40TX/conversations/messages/30

SS-40TX Transmitter for SS-40 Receiver
https://groups.yahoo.com/neo/groups/SS-40TX/conversations/messages/30 This Group is for support for the builders and users of the SS-40TX transmitter. This 40M transmitter is a companion to K8IQY's SS-40 receiver

View on groups.yahoo.com
https://groups.yahoo.com/neo/groups/SS-40TX/conversations/messages/30
Preview by Yahoo

I figure this applies just as much to the receiver group, so I'm posting
here as well.

Kudos to Jim, K8IQY and the 4sqrp group for a great effort! It's a fun
project and just seems to 'want to work'... 'out of the box'.

More later, 73,

David K3KY

# 663. Re: [SS-40] K3KY SS-40HT/SS-40TX Build

Yahoo group: SS-40
Date: 2015-09-11 18:13:47 UTC
From: geodyne49@...
Topic: 652  Message: 663

I just had my first QSO using the SS-40 Thursday evening 10 Sep 2015.
I worked Rich, N4PBQ in NC with 579 signals despite heavy QSB. Answered
his CQ. As I said, build the radio carefully and it 'just wants to work'. I really like
having an experience like that. Anyway, we had a pretty good 20 minute chat
despite the current disturbed HF propagation. It was 5 watts both ways.

Using my old J-38 was pretty tiring. I've been using keyers for years now,
and am pretty rusty with hand keying. Luckily I have a couple of K8 keyer
chips not being used right now. I'm going to put one of them 'inside' this
radio, (everything is mounted on a pine board right now for easy access)
I'll be fine once I can key this TX with a paddle.

More later- looks like this is going to be a fun radio and I plan to spend more
time tweaking it and trying accessories until it seems ready to package in my
own enclosure. I'm thinking the NM0S Hi Per Mite would be quite useful for
crowded band conditions. Also planning on including a frequency counter in
the package. I already added a 10-turn pot to the VXO, and that really makes
the tuning on the radio extra smooth.

73, David K3KY

# 664. Frequency Counter

Yahoo group: SS-40
Date: 2015-09-22 02:14:54 UTC
From: alfredkornfeld2@...
Topic: 664  Message: 664

Anyone with suggestions about an inexpensive frequency counter for use in the construction of the SS-40?

73, Al Kornfeld

# 665. Re: [SS-40] Frequency Counter

Yahoo group: SS-40
Date: 2015-10-05 13:09:36 UTC
From: Jim Kortge
Topic: 664  Message: 665

On 9/21/2015 10:14 PM, alfredkornfeld2@... [SS-40] wrote:

Anyone with suggestions about an inexpensive frequency counter for use in the construction of the SS-40?

73, Al Kornfeld

The 4 State QRP group Frequency Mite works well with the SS-40 Receiver if you like a CW readout.

72,

Jim, K8IQY

# 666. [SS-40] Frequency Counter

Yahoo group: SS-40
Date: 2015-10-06 12:40:13 UTC
From: Stephen Farthing
Topic: 664  Message: 666

Greetings from across the pond Al,

You can buy very nice and inexpensive counters like these

http://www.ebay.co.uk/itm/0-1-60MHz-20MHz-2-4GHz-Blue-RF-Signal-Frequency-Counter-Cymometer-Tester-/181573121672?hash=item2a4699f688

You can program the IF offset and some of the kind folks on the CWTD newsgroup have produced instructions on how to do this..

Best wishes,

Steve G0XAR

On Monday, 5 October 2015, Jim Kortge jim.k8iqy@... [SS-40] <SS-40@yahoogroups.com> wrote:

>
>
>
>
> On 9/21/2015 10:14 PM, alfredkornfeld2@... [SS-40] wrote:
>
> Anyone with suggestions about an inexpensive frequency counter for use in
> the construction of the SS-40?
>
> 73, Al Kornfeld
>
>
>
> The 4 State QRP group Frequency Mite works well with the SS-40 Receiver if
> you like a CW readout.
>
> 72,
>
> Jim, K8IQY
>
>
>
>

# 667. [SS-40] Frequency Counter

Yahoo group: SS-40
Date: 2015-10-06 13:10:46 UTC
From: Clutter
Topic: 664  Message: 667

Hi,Steve-

I've been having trouble accessing usenet recently. Do you know of any online sources of that usenet information? I'd appreciate any links you might provide.

Thanks, 73,

David K3KY

Greetings from across the pond Al,

You can buy very nice and inexpensive counters like these

http://www.ebay.co.uk/itm/0-1-60MHz-20MHz-2-4GHz-Blue-RF-Signal-Frequency-Counter-Cymometer-Tester-/181573121672?hash=item2a4699f688

You can program the IF offset and some of the kind folks on the CWTD newsgroup have produced instructions on how to do this..

Best wishes,

Steve G0XAR

# 668. Re: [SS-40] Frequency Counter

Yahoo group: SS-40
Date: 2015-10-06 13:28:46 UTC
From: Stephen Farthing
Topic: 664  Message: 668

Hi David,

http://www.cwtd.org/frequency/RF%20Signal%20Frequency%20Counter.pdf

Is what you need.

Regards,

Steve G0XAR

On Tuesday, 6 October 2015, Clutter geodyne49@... [SS-40] <
SS-40@yahoogroups.com> wrote:

>
>
> Hi,Steve-
>
> I've been having trouble accessing usenet recently. Do you know of any
> online
> sources of that usenet information? I'd appreciate any links you might
> provide.
>
> Thanks, 73,
>
> David K3KY
>
> Greetings from across the pond Al,
>
> You can buy very nice and inexpensive counters like these
>
>
> http://www.ebay.co.uk/itm/0-1-60MHz-20MHz-2-4GHz-Blue-RF-Signal-Frequency-Counter-Cymome
ter-Tester-/181573121672?hash=item2a4699f688
>
> You can program the IF offset and some of the kind folks on the CWTD
> newsgroup have produced instructions on how to do this..
>
> Best wishes,
>
> Steve G0XAR
>
>

# 669. Re: Ss-40HT Tuning Frequency Shift

Yahoo group: SS-40
Date: 2015-10-06 21:38:30 UTC
From: Jim Kortge
Topic: 669  Message: 669

On 10/5/2015 8:08 PM, morgamp52@... [4sqrp] wrote:
> Here are the results for shifting the VFO freq range...
>
> Original build: 6983 to 7037 kHz

Probably that low due to the out of spec L9 inductor. Most of them
are too high in value than the nominal 5.6 uH.
>
> 470pf in series with L9: 7010 to 7042 kHz

That looks really good. And 32 KHz of band coverage to boot,
including the two QRP watering holes at 7030 and 7040. Why did you go
beyond that with the toroid below?

>
> Hand wound toroid 32 turns on T37-2: 7020 to 7043 khz....

Only 23 KHz of coverage or am I missing something?
>
> I am happy with the toroid solution. Locking in the windings with a
> bit of nail polish has resulted in a rock solid VFO....

Did it drift with the 470 pF capacitor and original inductor?
>
> Thanks to all for your thoughts and ideas!
>
> 73,
> mike

72 and thanks for sharing your info Mike,

Jim, K8IQY

# 670. Re: Ss-40HT Tuning Frequency Shift

Yahoo group: SS-40
Date: 2015-10-09 16:05:32 UTC
From: geodyne49@...
Topic: 669  Message: 670

I'm sticking with the original high out-of-spec inductor L9 and a series cap in my SS-40HT for now. It did get me the widest tuning range. I had a 180pF polystyrene in there for a while. I have indeed noticed some drift (even after warmup). Recently found some NP0 ceramic disks in my collection, substituted a 220pF 16V NP0 and saw the drift decrease markedly (but there is still some). My tuning range is roughly 7002 to 7032KHz right now. BTW I tried my own toroid inductor, a white core T50-7 wound for about 5uH. I got a lot less tuning range with that coil, though I'd bet the VXO might have been more stable with it.

If the 4sqrp club gets in some new L9 inductors that are closer to 5.6uH, I would be very interested in buying one to try here. I do think that 7017 to 7043KHz or so is a better range for a QRP 40m radio.

BTW I continue to be delighted with the radio. Generally have it turned on as I work on various projects at the workbench. The main radio is mostly gathering dust this past month or two, due to both the SS-40 project and the stinko band conditions of late.

I must admit that it seems to me that it's asking a bit much of the operator at the other end to strain to pull my 5watts flea power out of the noise under recent conditions. It's been hard to make contacts using the SS-40TX. I'm working on updating my old WA2EBY FET power amp to run on 24-28V. Got a few of those excellent all-copper server heatsinks off of the auction site. You can buy these for 10-12 dollars if you shop carefully. It's an awesome chunk of pure copper, ought to be able to keep the IRF510 finals pretty cool. Apologies to all the QRP purists out there. Sometimes a little power helps a lot. OTOH I have had some wonderful ragchews at 5W on 40m and thoroughly enjoy that aspect of the hobby. Anyway, my 25W (12V) EBY amp will soon be a 50W+ (24V) amp, and that can help if the band is 'off'.

Love those QRP building projects! Makes for a lot of enjoyable HR workbench hours here. I love building...

73, David K3KY

# 671. Re: SS-40TX Step 4 test failure

Yahoo group: SS-40
Date: 2015-10-09 16:16:03 UTC
From: geodyne49@...
Topic: 615  Message: 671

This Test 4 threw me for a loop as well. I was expecting to see 0.2V less, as well. I didn't. I lost about one (part time) day to this, even trying unnecessary parts substitution (the transistor) until I finally reasoned my way to the conclusion that I was passing after all. I think the instruction could be reworded to be a bit clearer, Jim. Just mentioning that the voltage may be essentially the same as Vsupply would help immensely. The text sets up the *expectation* that 0.2V less should be seen. BTW this comes right after a test where, If I remember right, you do indeed see a 0.2V drop on the other switch. I think others are going to stumble over this as well.

73, David K3KY

# 672. Re: [SS-40] Frequency Counter

Yahoo group: SS-40
Date: 2015-10-05 22:49:30 UTC
From: alfred kornfeld
Topic: 664  Message: 672

Thanks
On Oct 5, 2015 9:14 AM, "Jim Kortge jim.k8iqy@... [SS-40]" <
SS-40@yahoogroups.com> wrote:

>
>
>
>
> On 9/21/2015 10:14 PM, alfredkornfeld2@... [SS-40] wrote:
>
> Anyone with suggestions about an inexpensive frequency counter for use in
> the construction of the SS-40?
>
> 73, Al Kornfeld
>
>
>
> The 4 State QRP group Frequency Mite works well with the SS-40 Receiver if
> you like a CW readout.
>
> 72,
>
> Jim, K8IQY
>
>
>
>

# 673. Another SS-40 up and running and some comments/questions

Yahoo group: SS-40
Date: 2015-11-04 09:27:14 UTC
From: antonio@...
Topic: 673  Message: 673

Hi Group,
I am new to the group; my name is Antonio, EA4LE and KC2HAX. I recently ordered the SS-40 receiver and the TX strip. The SS-40 is up and running and I am really amazed about the quality of this receiver. Congrats to Jim for such a fine design and to the 4SQRP folks for making this excellent kit available, I am most grateful to you guys!

The only thing that was a bit confusing to me during the assembly and setup process was the AGC settings. With the antenna plugged, 40m band background noise and no signal the voltage is 1.4V and this does not change with the pot settings. However, if I turn the trimming pot clockwise and tune in some strong signals the AGC slowly works and the voltage drops to abt 1.2 V, at close to maximum setting some “pops” are evident but disappear if I pull back the pot a bit. Thus, I think I have a functional AGC but there is no way I can get the 1.1V target with just the background noise.

The VXO tuning range is quite broad, roughly 40 KHz! I can receive from abt 6990 up to 7.032 Mhz. Wish I could move this from 7.000 to 7.040 ;)

Finally, I got from the bay what it seems to be a Chinese knock-off of DL4YHF’s PIC based frequency counter (http://www.qsl.net/dl4yhf/freq_counter/freq_counter.html). I wonder what would be the optimal point to tap the signal for the freq counter and what kind of buffering/amplification would be required as the frequency input in the board goes directly to the PIC pin.

Best 73 de Antonio

# 674. Re: [SS-40] Another SS-40 up and running and some comments/questions

Yahoo group: SS-40
Date: 2015-11-16 14:37:12 UTC
From: Jim Kortge
Topic: 673  Message: 674

On 11/4/2015 4:27 AM, antonio@... [SS-40] wrote:

Hi Group,

Hello Antonio,

I am new to the group; my name is Antonio, EA4LE and KC2HAX. I recently ordered the SS-40 receiver and the TX strip. The SS-40 is up and running and I am really amazed about the quality of this receiver.

That's nice to hear!? :-)

Congrats to Jim for such a fine design and to the 4SQRP folks for making this excellent kit available, I am most grateful to you guys!

Thanks for the kind words.

The only thing that was a bit confusing to me during the assembly and setup process was the AGC settings. With the antenna plugged, 40m band background noise and no signal the voltage is 1.4V and this does not change with the pot settings.

It should change as TR1 is adjusted, assuming of course that TR1 and TR2 are installed in their correct locations.? We've had some builders swap those and the AGC doesn't work correctly and neither does the Local Oscillator; it won't drive the mixer correctly because of low output.

However, if I turn the trimming pot clockwise and tune in some strong signals the AGC slowly works and the voltage drops to abt 1.2 V, at close to maximum setting some “pops” are evident but disappear if I pull back the pot a bit. Thus, I think I have a functional AGC but there is no way I can get the 1.1V target with just the background noise.

It doesn't appear to be working quite right to me.? You should be able to virtually shut down the receiver front-end with just the antenna connected and tuned on noise by adjusting TR1.? Either the antenna isn't supplying very much signal or there are issues elsewhere in the receiver.? Does the front-end of the receiver tune up OK?? You should see double peaks when you turn TC2 or TC3 through 360 degrees of rotation.

The VXO tuning range is quite broad, roughly 40 KHz! I can receive from abt 6990 up to 7.032 Mhz. Wish I could move this from 7.000 to 7.040 ;)

You can.? Install a 330 pF NP0 capacitor in series with inductor L9.? That should move the tuning range up.? If too much, use a larger capacitor like 390 pF or 470 pF.? The larger the capacitor, the smaller the frequency shift will be.

Finally, I got from the bay what it seems to be a Chinese knock-off of DL4YHF’s PIC based frequency counter (http://www.qsl.net/dl4yhf/freq_counter/freq_counter.html). I wonder what would be the optimal point to tap the signal for the freq counter and what kind of buffering/amplification would be required as the frequency input in the board goes directly

to the PIC pin.

I would take it from the hot end of R37 through a 2.2 - 4.7 pF? capacitor to the input of your counter.

Best 73 de Antonio

72 and thanks for your email Antonio,

Jim, K8IQY

# 675. Re: Another SS-40 up and running and some comments/questions

Yahoo group: SS-40
Date: 2015-11-20 10:45:05 UTC
From: antonio@...
Topic: 673  Message: 675

Thank you Jim!!!

I am going to try your suggestions this weekend and will provide feedback!

Btw, I am also building the TX strip and have questions but I will post them in the other group.

# 676. Re: A friend in need is always there... when in need.

Yahoo group: SS-40
Date: 2015-12-02 16:19:31 UTC
From: Jim Kortge
Topic: 676  Message: 676
Attachments: 4 described; binary payloads are missing from this source WARC

On 12/2/2015 10:16 AM, bschmd63021@... wrote:
> That may very well have happened. I will check that when I get home
> from work tonight.
>
> THANKS!

OK, attached are some VXO measurements on one of my early SS-40 Receivers, but should be near what you might measure on yours. There may be some minor differences in the VXO components, but don't worry about that. They were taken with my digital scope. This receiver does not have R33 installed, TR2 is set at the middle of its range, and the VR2 tuning pot was set fully CW, i.e., the highest frequency that the VXO can tune. I believe the trace shapes and amplitudes to be representative of any SS-40 Receiver VXO section under this set of test conditions.

Hope this information helps.

72,

Jim, K8IQY

# 677. Re: Receivers Work

Yahoo group: SS-40
Date: 2015-12-03 15:09:12 UTC
From: Jim Kortge
Topic: 677  Message: 677

On 12/3/2015 12:49 AM, Bob Schmedake wrote:

I just added the Freq-Mite to the receiver. The frequency range is 7.005 - 7.040 MHz.

Nice!

?So after fixing this receiver, I went back and checked my original SS-40HT. I mixed up the trimmer on it as well.

Ouch!!

Once I swapped the trimmers, ?it started working again. So now I have 7.005 through 7. 048 between the pair of these receivers. Again, thanks for the help. I hope to be on the air in the coming weeks.

Good show.? Glad to hear both receivers are working as designed!? Will look for you on the air.

72,

Jim, K8IQY

# 678. Re: Love My SS-40 :-)

Yahoo group: SS-40
Date: 2015-12-06 19:39:08 UTC
From: jackmargolis@...
Topic: 607  Message: 678

Have you modified any of your receivers to work on other bands?

Jack

# 679. Re: [SS-40] Re: Love My SS-40 :-)

Yahoo group: SS-40
Date: 2015-12-14 14:06:42 UTC
From: Jim Kortge
Topic: 607  Message: 679

On 12/6/2015 2:39 PM, jackmargolis@... [SS-40] wrote:

Have you modified any of your receivers to work on other bands?

Yes I have Jack.? I have one running on 10-Meters and another partially built for 30-Meters.? I need to finish the 30-Meter unit and see how well it works.? I was using the 10-Meter receiver Saturday and Sunday listening to the 10-Meter contest.

72,

Jim, K8IQY

# 680. Missing parts

Yahoo group: SS-40
Date: 2016-01-06 01:30:22 UTC
From: tlcfarmer@...
Topic: 680  Message: 680

I am missing some parts for my SS-40, and the link to the responsible party has been removed from the club webpage, so I will ask for some help here.

My SS-40 is about a 2012 vintage and is missing these parts:

3x .1uF (C4, C47, C56)
2x 47pF (C49, C50)
1x 270pF (C13)
1x .01uF (C18)

That is all from a inventory at the VXO steps were I ran out of the 47pF and am stuck there.

My correct address is on qrz.com

Guess I should have built it years ago!

Lincoln

N9IN

# 681. Re: Missing parts

Yahoo group: SS-40
Date: 2016-01-06 19:40:39 UTC
From: k8meg@...
Topic: 680  Message: 681

The missing parts are being sent by Gary Coleman.
Let us know how your build goes.

72, K8MEG

# 682. Re: Missing parts

Yahoo group: SS-40
Date: 2016-01-07 00:31:34 UTC
From: Wayne Dillon
Topic: 680  Message: 682

Good evening Lincoln,
I'll put the parts in the mail tomorrow, I had to check that I still had a few wahe I got home. Sorry for not answering earlier.
Thanks for your support of the $ State QRP Group. I presume that your address is good in QRZ?
Blessings
Wayne - NQ0RP (was KC0PMH) a former kitter of the SS40.

--

*QRP* - *EFFICIENCY AND SKILL, NOT POWER.*

I'm British by birth but American by CHOICE!

Jesus came to pay a debt He didn't owe because we owe a debt we cannot pay...

The Lord bless you and keep you
The Lord make His face shine upon you, and be gracious unto you
The Lord lift up his contenance upon you and give you peace.

God Bless from Wayne Dillon - NQ0RP

Joshua 24:14-15
2 Cor 5:17
1 Jn 2:17

NB. It is better to remain silent and be thought a fool than open one's mouth and remove all doubt.

http://www.4sqrp.com/index.php
Membership Chairman - 4SQRP Group
4SQRP 40m NCS
4SQRP #95
FISTS 17184
FPQRP #342 (Flying Pigs QRP Club)
NAQCC # 0759
QRP-ARCI #11505
SKCC #1155T
SOC #848
30MDG#1176
NEQRP #693
GORC #192
DMC (Digital Modes Club) # 06686

# 683. Re: Missing parts

Yahoo group: SS-40
Date: 2016-01-13 01:35:45 UTC
From: tlcfarmer@...
Topic: 680  Message: 683

After being strangely delayed in Atlanta, Ga for a few days, the parts arrived today.

I have just completely the rest of the assembly a few minutes ago and the radio seems to work well. I need to patch the audio into the computer and use Spectrogram to peak the filter caps and set the audio frequency.

Thank you for the replacement parts. On to the SS-40TX.....

Lincoln

N9IN

# 684. Re: [SS-40] Re: Missing parts

Yahoo group: SS-40
Date: 2016-01-13 20:17:27 UTC
From: Jim Kortge
Topic: 680  Message: 684

On 1/12/2016 8:35 PM, tlcfarmer@... [SS-40] wrote:

After being strangely delayed in Atlanta, Ga for a few days, the parts arrived today.

I have just completely the rest of the assembly a few minutes ago and the radio seems to work well.? I need to patch the audio into the computer and use Spectrogram to peak the filter caps and set the audio frequency.

Thank you for the replacement parts.? On to the SS-40TX.....

Lincoln

N9IN

Good show Lincoln.? Glad the parts made it to you and the receiver is working.

72 and thanks for the update,

Jim, K8IQY

# 685. Problem Trouble shooting Audio Amplifier

Yahoo group: SS-40
Date: 2016-04-15 20:32:06 UTC
From: km4jrg@...
Topic: 685  Message: 685

I am a relative neophyte in constructing eletronic kits. I have completed the first five stages of assembling
the SS40 Receiver and have hit a problem. The first four stages tested as described in the assembly
manual. I have completed assembling the fifth state--i.e. the audio amplifier. According to the manual
you are to connect earphones, power the unit up, and touch either pad of resistor 21. A hum should be
heard in the earphones. I power up, touch the resistor and get no sound. I have checked to see that I
used the proper parts and that they are place properly. The electrolytic capacitors are placed correctly.
I don't have any idea where to go from here. Can anyone out there give me some steps to take to check
this out. I have access to most common tools etc. through my ham radio club.
Thanks so much in advance for any suggestions.

73 Robert W. Herrmann KM4JRG
Williamsburg, Va.

# 686. Re: [SS-40] Problem Trouble shooting Audio Amplifier

Yahoo group: SS-40
Date: 2016-04-25 14:21:08 UTC
From: Jim Kortge
Topic: 685  Message: 686

On 4/15/2016 4:32 PM, km4jrg@... [SS-40] wrote:

I am a relative neophyte in constructing eletronic kits.?? I have completed the first five stages of assembling
the SS40 Receiver and have hit a problem.? The first four stages tested as described in the assembly
manual.? I have completed assembling the fifth state--i.e. the audio amplifier. According to the manual
you are to connect earphones, power the unit up, and touch either pad of resistor 21.? A hum should be
heard in the earphones.? I power up, touch the resistor and get no sound.? I have checked to see that I
used the proper parts and that they are place properly.? The electrolytic capacitors are placed correctly.

How about the VR1 audio potentiometer.? Are you sure that it is soldered correctly?

Do you see any dc voltage on either side of resistor R19 when the receiver is powered on?? On the left side should be Vcc and on the right side, approximately 0.1 volts less than that.

I don't have any idea where to go from here.? Can anyone out there give me some steps to take to check
this out.

Can you take a digital photo of the top and bottom sides of the PCB as it is currently populated and send it to me for analysis.? Maybe I can spot something.

I have access to most common tools etc. through my ham radio club.
? ? Thanks so much in advance for any? suggestions.?
???

?????????????????????????????????????????? 73? Robert W. Herrmann? KM4JRG
?????????????????????????????????????????? Williamsburg, Va.

72 Robert,

Jim, K8IQY

# 687. Re: [SS-40] Problem Trouble shooting Audio Amplifier

Yahoo group: SS-40
Date: 2016-05-06 21:18:52 UTC
From: km4jrg@...
Topic: 685  Message: 687

To: Jim,KB1QY
From: Robert Herrmann, KM4JRG

Thank you for your suggestion for trouble shooting my SS-40. When I powered it up and tested the #19
resistor I found the following: I used a battery with approximately 12.5 volts. When I checked the pad on
the left side looking back from the pot I got a voltage of approximately 12.5 volts. When I tested the the
other side I got zero volts. I then tested the resistor's value with no power and got a reading of zero ohms.
I replaced resistor 19 and lo and behold there was a hum, the volume of which I could control with the pot.
Funny what havoc a quarter watt 10 ohm resistor can cause. So on to the audio mute section.
Again, thank you so much for your help.

73 Bob KM4JRG

# 688. Availability

Yahoo group: SS-40
Date: 2016-06-15 16:13:39 UTC
From: w7vn@...
Topic: 688  Message: 688

Any news about when SS-40 kits will be available?

# 689. Re: [SS-40] Availability

Yahoo group: SS-40
Date: 2016-06-27 15:48:43 UTC
From: Jim Kortge
Topic: 688  Message: 689

On 6/15/2016 12:13 PM, w7vn@... [SS-40] wrote:

Any news about when SS-40 kits will be available?

I don't believe there will be any more runs of the SS-40HT Receiver.? It has been retired as best I know.? Maybe someone else with more knowledge will jump in if I am wrong.? My advice is to find someone with an unbuilt kit.

72,

Jim, K8IQY

# 690. NS-40 component values

Yahoo group: SS-40
Date: 2016-07-09 18:07:38 UTC
From: jd_compton@...
Topic: 690  Message: 690

I'm considering building an NS-40 close on a perf-board. I can get the values of the components from the schematic, but I'm not sure what the current capacity of L1 needs to be. An actual part number would help!

I'm planning on winding air-core inductors for the 4 L* using 18 or 20 guage magnet wire, so I would think that would take care of the current maximums for those components.

Any thoughts or guidance would be appreciated, or if there's some reason why this wouldn't work, please let me know and why.

Jim C.

# 691. Re: NS-40 component values

Yahoo group: SS-40
Date: 2016-07-09 18:09:53 UTC
From: jd_compton@...
Topic: 690  Message: 691

Sorry! Put this question/comment in the wrong group! Still.....if anyone has an answer, I'm still interested! Jim C.

# 692. Enclosure info?

Yahoo group: SS-40
Date: 2016-07-12 19:28:11 UTC
From: Jim.Allen@...
Topic: 692  Message: 692

Howdy! W6OGC here.

I have both kits, receiver and transmitter. I started the receiver but completion has been delayed by old age, decrepitude and other concerns. Anyway, I intend to build both and enjoy them ASAP.

One puzzle has been a suitable enclosure. Does anyone have any suggestions, ideas, hints, etc?

TIA

73

# 693. Re: [SS-40] Enclosure info?

Yahoo group: SS-40
Date: 2016-07-25 18:25:37 UTC
From: blackbelair
Topic: 692  Message: 693

---
On Tue, 7/12/16, Jim.Allen@longhornband.net [SS-40] <SS-40@yahoogroups.com> wrote:

Subject: [SS-40] Enclosure info?
To: SS-40@yahoogroups.com
Date: Tuesday, July 12, 2016, 12:28 PM

Take a look at this great kit enclosure! I have one for my 30 M transceiver kit.
http://www.aa0zz.com.

73, Fred
k6kub

Howdy!  W6OGC
here.
I have both kits, receiver
and transmitter.  I started the receiver but completion has
been delayed by old age, decrepitude and other concerns.
 Anyway, I intend to build both and enjoy them
ASAP.
One puzzle has been a
suitable enclosure.  Does anyone have any suggestions,
ideas, hints, etc?
TIA
73

# 694. Re: [SS-40] Enclosure info?

Yahoo group: SS-40
Date: 2016-07-25 18:51:03 UTC
From: blackbelair
Topic: 692  Message: 694

---
On Mon, 7/25/16, blackbelair blackbelair@... [SS-40] <SS-40@yahoogroups.com> wrote:

Subject: Re: [SS-40] Enclosure info?
To: SS-40@yahoogroups.com
Date: Monday, July 25, 2016, 11:25 AM

---

On Tue, 7/12/16, Jim.Allen@longhornband.net [SS-40]
<SS-40@yahoogroups.com> wrote:

Subject: [SS-40] Enclosure info?

To: SS-40@yahoogroups.com

Date: Tuesday, July 12, 2016, 12:28 PM

Take a look at this great kit enclosure! I have one for my
30 M transceiver kit.

http://www.aa0zz.com.

73, Fred

k6kub

Let me rewrite that url. It's http://www.aa0zz.com

Howdy!  W6OGC

here.

I have both kits, receiver

and transmitter.  I started the receiver but completion
has

been delayed by old age, decrepitude and other concerns.

 Anyway, I intend to build both and enjoy them

ASAP.

One puzzle has been a

suitable enclosure.  Does anyone have any suggestions,

ideas, hints, etc?

TIA

73

# 695. Re: [SS-40] Enclosure info?

Yahoo group: SS-40
Date: 2016-07-25 23:15:14 UTC
From: Shawn Reed
Topic: 692  Message: 695

I made an enclosure that measures:  6" wide, 2-3/4" tall, and 5" deep, which made for plenty of room , stacking both boards. Got to watch it on head space, while centering the front panel controls, for a middle of the road type thing. Otherwise, there are some brand case suppliers out there tho I don't recall their names. 73, Shawnr, kf7yff.

On Monday, July 25, 2016 7:13 AM, "Jim.Allen@... [SS-40]" <SS-40@yahoogroups.com> wrote:

Howdy!  W6OGC here.
I have both kits, receiver and transmitter.  I started the receiver but completion has been delayed by old age, decrepitude and other concerns.  Anyway, I intend to build both and enjoy them ASAP.
One puzzle has been a suitable enclosure.  Does anyone have any suggestions, ideas, hints, etc?
TIA
73

# 696. Re: SS-40 key clicks

Yahoo group: SS-40
Date: 2016-07-30 14:34:18 UTC
From: Jim Kortge
Topic: 696  Message: 696

On 7/29/2016 4:29 PM, Pat Byers wrote:

Hi Jim,

GM Pat,

Sorry to bother you this fine summer day but I'm hoping it won't take much of your time to help me solve a problem.

No problem.

I finally finished the tx part of the SS-40 combo but when I checked out the transceiver I noticed that there are loud key clicks on both key down and key up. Has this issue popped up before?

Yes and no.? I found that issue when I first designed the Tx board and hosed it up to the receiver.

Is there a simple fix?

Yes, you need to change resistors R18 and R25 to 47K Ohms to allow more audio through during transmit so that you can hear your keying and change capacitor C42 to 0.033uF to change the mute timing so you don't get key clicks.? Try that and let me know if that fixes the issue.

TIA

73,

Pat

72 Pat and thanks for your email,

Jim, K8IQY

# 697. Re: Enclosure info?

Yahoo group: SS-40
Date: 2016-07-26 20:39:17 UTC
From: ronbaechle@...
Topic: 692  Message: 697

PERFECT ready made enclosures $7.00 to $10.00 with speaker vents punched both sides Go to circuitspecialists.com and search enclosures E1 ,E2 or E3 . Can see one I built with dds/vfo and a m0rzf amp installed in same enclosure at the photo section of mfj-radios yahoo site. Unbelievable what you get for the money ! w6ocg I think you will like these and take a look at qrz.com and see what I've done with other simple enclosures. Good Luck Ron wd4gwk

# 698. Missing transistor

Yahoo group: SS-40
Date: 2016-08-13 23:06:03 UTC
From: Jim.Allen@...
Topic: 698  Message: 698

I'm just now getting around to building my transceiver. I started right after I bought it, then got into other concerns. I spent the afternoon getting acquainted, again, and putting some parts on the board.

I noticed that I am missing a J310. When I did the arrival inventory, I had all of them. Maybe one of the cats ate one. Anyway, where is the easiest fastest place to obtain another?

I wish I had worked on this straight through. Not only would it be finished and me working the world with it, but I could still see the markings on most of the tiny parts. I just got new lenses too. The SA61something or other doesn't look like what it is supposed to be. Is there some variation in these markings?

73 W6OGC Jim Allen

# 699. Re: [SS-40] Enclosure info?

Yahoo group: SS-40
Date: 2016-07-25 23:18:42 UTC
From: Jim Allen
Topic: 692  Message: 699

How did you make it? From what?

TIA

73 de W6OGC Jim Allen

Sent from my iPad

> On Jul 25, 2016, at 18:15, Shawn Reed sreedq1014@... [SS-40] <SS-40@yahoogroups.com> wrote:
>
> I made an enclosure that measures: 6" wide, 2-3/4" tall, and 5" deep, which made for plenty of room , stacking both boards. Got to watch it on head space, while centering the front panel controls, for a middle of the road type thing. Otherwise, there are some brand case suppliers out there tho I don't recall their names. 73, Shawnr, kf7yff.
>
>
> On Monday, July 25, 2016 7:13 AM, "Jim.Allen@... [SS-40]" <SS-40@yahoogroups.com> wrote:
>
>
>
> Howdy! W6OGC here.
>

> I have both kits, receiver and transmitter. I started the receiver but completion has been delayed by old age, decrepitude and other concerns. Anyway, I intend to build both and enjoy them ASAP.
>
> One puzzle has been a suitable enclosure. Does anyone have any suggestions, ideas, hints, etc?

>
> TIA
>
> 73
>
>
>

# 700. Re: [SS-40] Enclosure info?

Yahoo group: SS-40
Date: 2016-07-25 19:55:25 UTC
From: Jim Allen
Topic: 692  Message: 700

I wish it were that simple.

Actually, I have corresponded with Craig last month about this. He has designed several enclosures, but none for the SS-40. The ones he has are too small. The SS-40 needs 5.25x4.0"

I wish something like that was available. I have the EZ Keyer II, and it is pretty slick.

73 de W6OGC Jim Allen
Sent from my iPad

> On Jul 25, 2016, at 13:51, blackbelair blackbelair@... [SS-40] <SS-40@yahoogroups.com> wrote:

>
>
> ---
> On Mon, 7/25/16, blackbelair blackbelair@... [SS-40] <SS-40@yahoogroups.com> wrote:
>
> Subject: Re: [SS-40] Enclosure info?
> To: SS-40@yahoogroups.com
> Date: Monday, July 25, 2016, 11:25 AM
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> ---
>
> On Tue, 7/12/16, Jim.Allen@longhornband.net [SS-40]
> <SS-40@yahoogroups.com> wrote:
>
>
>
> Subject: [SS-40] Enclosure info?
>
> To: SS-40@yahoogroups.com

>
> Date: Tuesday, July 12, 2016, 12:28 PM
>
>
>
>
>
>
>
> Take a look at this great kit enclosure! I have one for my
> 30 M transceiver kit.
>
> http://www.aa0zz.com.
>
>
>
> 73, Fred
>
> k6kub
>
>
> Let me rewrite that url. It's http://www.aa0zz.com
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> Howdy! W6OGC
>
> here.
>
> I have both kits, receiver
>
> and transmitter. I started the receiver but completion
> has
>
> been delayed by old age, decrepitude and other concerns.
>
> Anyway, I intend to build both and enjoy them
>
> ASAP.

>
> One puzzle has been a
>
> suitable enclosure. Does anyone have any suggestions,
>
> ideas, hints, etc?
>
> TIA
>
> 73
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>

# 701. Re: Enclosure info?

Yahoo group: SS-40
Date: 2016-08-14 19:29:49 UTC
From: Jim.Allen@...
Topic: 692  Message: 701

What did you make it from? Aluminum sheet? What thickness?

TIA
73 W6OGC

# 702. Re: [SS-40] Missing transistor

Yahoo group: SS-40
Date: 2016-08-14 22:58:13 UTC
From: Pat Byers
Topic: 698  Message: 702

Hi Jim,
For the J310 I recommend Diz at
Toroids, Ferrites, Parts, Kits, Toroid King, QRP Erector Set
|  |
|  | |  |  |  |  |  |
| Toroids, Ferrites, Parts, Kits, Toroid King, QRP Erector...Toroids, Ferrites, Parts, Kits, Toroid King, QRP Erector Set |
| |
| View on www.kitsandparts.com | Preview by Yahoo |
| |
|  |

Reasonable price, guaranteed high quality and fast service. You can't go wrong.
As for the enclosure, the board size, configuration and on-board connectors make the SS-40 rx/tx combo awkward to package. I looked at a number of enclosures that were either too small or too big. I finally settled on a Hammond 1411QU (7x5x3) that should work but, since I mounted the connectors on the board as instructed to do, drilling the front panel is too much trouble. I'm going to leave my radio naked. If you haven't already done so, you might consider leaving the connectors off the board.
BTW, I listened a bit to the WAE contest last night. There were some huge signals and the SS-40 handled them with aplomb. Only problem is a bit of a click each time the AGC encounters a strong signal but careful adjustment of the AGC makes it manageable.
Hope this helps.
73,
Pat Byers  VE3EUR

On Sunday, August 14, 2016 5:52 PM, "Jim.Allen@... [SS-40]" <SS-40@yahoogroups.com> wrote:

I'm just now getting around to building my transceiver.  I started right after I bought it, then got into other concerns.  I spent the afternoon getting acquainted, again, and putting some parts on the board.
I noticed that I am missing a J310.  When I did the arrival inventory, I had all of them.  Maybe one of the cats ate one.  Anyway, where is the easiest fastest place to obtain another?
I wish I had worked on this straight through.  Not only would it be finished and me working the world with it, but I could still see the markings on most of the tiny parts.  I just got new lenses too.  The SA61something or other doesn't look like what it is supposed to be.  Is there some variation in these markings?
73 W6OGC Jim Allen

# 703. Re: Enclosure info?

Yahoo group: SS-40
Date: 2016-08-20 14:08:18 UTC
From: sreedq1014@...
Topic: 692  Message: 703
Attachments: 4 described; binary payloads are missing from this source WARC

I Here are a few photos of my rxtx case. I built it from salvage-nice computer case. It has three pieces. The faceplate I drilled for was with the board mounted components in place. I left the back open, where you see the pwr. plug. The hardware was what I had on hand. I have an additional computer case, of same, if you would like me to cut out the pieces and send to you. The alu. material is 5051. 73, Shawnr, kf7yff.

# 704. Test gear

Yahoo group: SS-40
Date: 2016-08-19 02:07:41 UTC
From: Jim Allen
Topic: 704  Message: 704

I am progressing on my SS-40. I see a RF probe is called for, as well as a signal generator. I have neither. What can I do to get this running without those?

Can I use an antenna analyzer to generate a signal to peak up?

TIA

73 W6OGC Jim Allen

Sent from my iPad

# 705. Re: [SS-40] Re: Enclosure info?

Yahoo group: SS-40
Date: 2016-08-14 22:46:18 UTC
From: Jim Allen
Topic: 692  Message: 705

Those are good looking enclosures all right, and the rigs on your QRZ page are phenomenal. It looks to me like the dimensions of the E1-3 enclosures are not right for this board which is 5.25 x 4.00". Too bad!

Thanks. Where did you get the ones you used?

73 de W6OGC Jim Allen

Sent from my iPad

> On Jul 26, 2016, at 15:39, ronbaechle@... [SS-40] <SS-40@yahoogroups.com> wrote:
>
> PERFECT ready made enclosures $7.00 to $10.00 with speaker vents punched both sides Go to circuitspecialists.com and search enclosures E1 ,E2 or E3 . Can see one I built with dds/vfo and a m0rzf amp installed in same enclosure at the photo section of mfj-radios yahoo site. Unbelievable what you get for the money ! w6ocg I think you will like these and take a look at qrz.com and see what I've done with other simple enclosures. Good Luck Ron wd4gwk
>
>

# 706. Re: [SS-40] Re: Enclosure info?

Yahoo group: SS-40
Date: 2016-08-23 01:03:00 UTC
From: ronbaechle@...
Topic: 692  Message: 706

Hi Jim Sorry late reply. size aprox 6 inch wide by 6.5 deep and 2 5/8 height. Just did a rough outside measure from one of mine . The other enclosures on QRZ of my station are Ten Tec enclosures no longer sold. The enclosures with meter are from china and come in various sizes with vents . I do have a charcoal ten tec that I might not use .I will try to contact you if you have a Qrz email address posted .Or contact me Ron wd4gwk

# 707. Re: Test gear

Yahoo group: SS-40
Date: 2016-08-23 15:53:28 UTC
From: Jim.Allen@...
Topic: 704  Message: 707

In searching for an rf probe and signal generator, I stumble across the info that there is a circuit for both in the K2 manual. Sure enough, in appendix E, page 9. The manual is available online for convenience of reference for those who don't have K2's.

I didn't build my K2, so don't have the furnished parts, but they are common ordinary components, pretty simple.

# 708. Specs on VR1--1K pot

Yahoo group: SS-40
Date: 2016-08-28 19:25:11 UTC
From: km4jrg@...
Topic: 708  Message: 708

I am in the process of assembling The SS40 Receiver. Due to a careless mistake I have damaged the 1K
Pot--VR1. Consulting the Bill of materials I find nothing that mentions the manufacturer or part number. Can anyone help out. I am completely at a standstill until I can replace this pot.
Thanks in advance for any and all replies to my message,
Bob H KM4JRG

# 709. Re: [SS-40] Specs on VR1--1K pot

Yahoo group: SS-40
Date: 2016-09-05 22:39:48 UTC
From: Jim Kortge
Topic: 708  Message: 709

On 8/28/2016 3:25 PM, km4jrg@... [SS-40] wrote:

I am in the process of assembling The SS40 Receiver.? Due to a careless mistake I have damaged the 1K
Pot--VR1.? Consulting the Bill of materials I find nothing that mentions the manufacturer or part number.? Can anyone help out.

Yes, I can.

VR1 is Mouser P/N 313-1000F-1K.? The current price is $1.96.

? I am completely at a standstill until I can replace this? pot.
Thanks in advance for any and all replies to my message,

Bob H? KM4JRG

72,

Jim, K8IQY

# 710. Re: [SS-40] Re: Test gear

Yahoo group: SS-40
Date: 2016-09-06 00:26:28 UTC
From: Dale Putnam
Topic: 704  Message: 710

QRPguys have a very nifty rf probe that doesn't need a radio or multimeter to operate. See QRPGuys.com

Have a great day,
--... ...-- Dale - WC7S in Wy

_____
From: SS-40@yahoogroups.com <SS-40@yahoogroups.com> on behalf of Jim.Allen@... [SS-40] <SS-40@yahoogroups.com>
Sent: Tuesday, August 23, 2016 9:53 AM
To: SS-40@yahoogroups.com
Subject: [SS-40] Re: Test gear

In searching for an rf probe and signal generator, I stumble across the info that there is a circuit for both in the K2 manual. Sure enough, in appendix E, page 9. The manual is available online for convenience of reference for those who don't have K2's.

I didn't build my K2, so don't have the furnished parts, but they are common ordinary components, pretty simple.